AL-BAHER

Mathematics

Primary



First Term
Parents' Guide
With answers

بتصريح وتحت إشراف
وزارة التربية والتعليم والتعليم الفني
MINISTRY OF EDUCATION AND TECHNICAL EDUCATION

2023

Contents

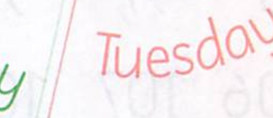


Days of the Week



1 week = 7 days

Saturday
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday





I learn:

Days of the Week















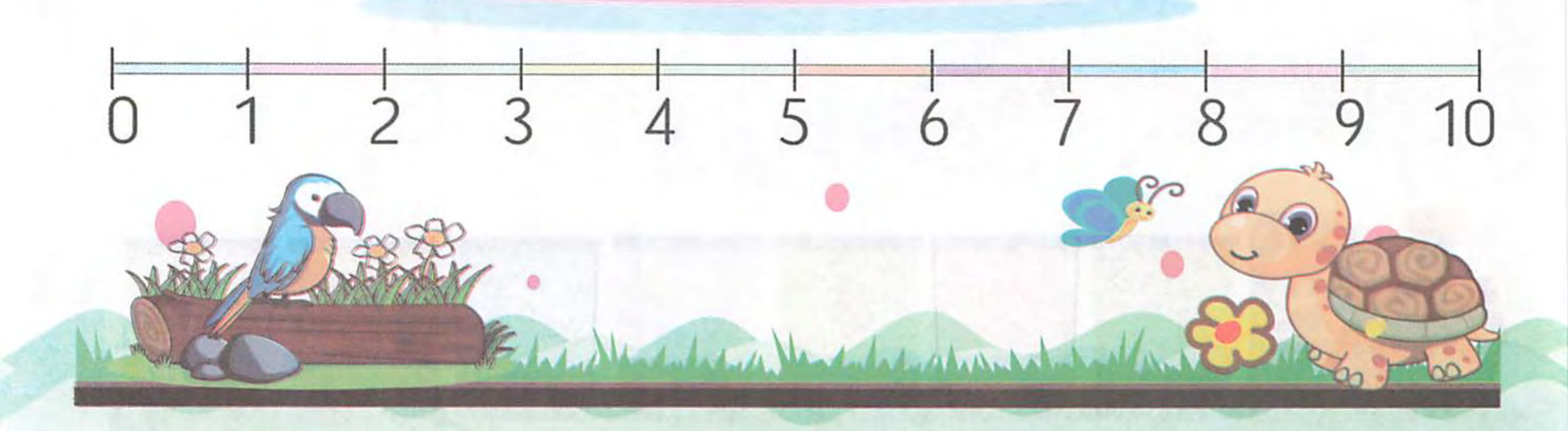


The 120 Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Number Line

0 1 2 3 4 5 6 7 8 9 10



Multiplication Tables

Any number × zero
=Zero

Any number × 1
=The same number



1	2	3	4	5
1×1=1	2×1=2	3×1=3	4×1=4	5×1=5
1×2=2	2×2=4	3×2=6	4×2=8	5×2=10
1×3=3	2×3=6	3×3=9	4×3=12	5×3=15
1×4=4	2×4=8	3×4=12	4×4=16	5×4=20
1×5=5	2×5=10	3×5=15	4×5=20	5×5=25
1×6=6	2×6=12	3×6=18	4×6=24	5×6=30
1×7=7	2×7=14	3×7=21	4×7=28	5×7=35
1×8=8	2×8=16	3×8=24	4×8=32	5×8=40
1×9=9	2×9=18	3×9=27	4×9=36	5×9=45
1×10=10	2×10=20	3×10=30	4×10=40	5×10=50
1×11=11	2×11=22	3×11=33	4×11=44	5×11=55
1×12=12	2×12=24	3×12=36	4×12=48	5×12=60

6	7	8	9	10
6×1=6	7×1=7	8×1=8	9×1=9	10×1=10
6×2=12	7×2=14	8×2=16	9×2=18	10×2=20
6×3=18	7×3=21	8×3=24	9×3=27	10×3=30
6×4=24	7×4=28	8×4=32	9×4=36	10×4=40
6×5=30	7×5=35	8×5=40	9×5=45	10×5=50
6×6=36	7×6=42	8×6=48	9×6=54	10×6=60
6×7=42	7×7=49	8×7=56	9×7=63	10×7=70
6×8=48	7×8=56	8×8=64	9×8=72	10×8=80
6×9=54	7×9=63	8×9=72	9×9=81	10×9=90
6×10=60	7×10=70	8×10=80	9×10=90	10×10=100
6×11=66	7×11=77	8×11=88	9×11=99	10×11=110
6×12=72	7×12=84	8×12=96	9×12=108	10×12=120





January

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					



February

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					



March

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



April

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



May

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



June

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		





July

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



August

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			



September

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	



October

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					



November

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			



December

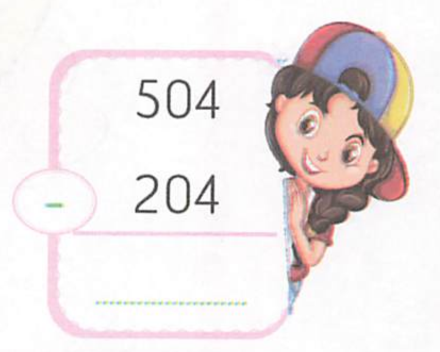
Sat	Sun	Mon	Tues	Wed	Thurs	Fri
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

General Revision

Revision (1)

1 Find the result:

543	204	389	504
+ 232	+ 532	− 172	− 204
....	....	....	....



2 Compare using (>, < or =):

139	◯	452	215	◯	200 + 15
652	◯	231	300 + 20 + 7	◯	372
295	◯	295	9 + 310	◯	390
324	◯	300 + 20 + 4	123 + 100	◯	123 − 100

3 Complete in the same pattern:

1. 12, 14, 16, ..., ..., ..., ...
2. 97, 90, 83, ..., ..., ..., ...
3. 5, 10, 15, ..., ..., ..., ...
4. 90, 80, 70, ..., ..., ..., ...
5. 33, 44, 55, ..., ..., ..., ...



Nour divided a pizza into 4 parts. She gave her brother one part.

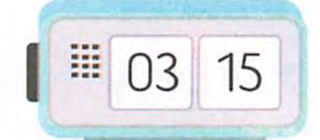
Write the fraction that represents the left parts.

....

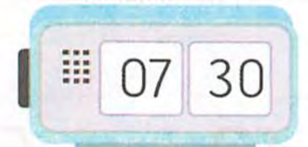
....

5 Draw the hands that show the time:













6 Complete:

1. The square has .... sides .... in length.
2. The rhombus has .... sides .... in length.
3. Five hundred, thirty-four (in standard form) ....
4. 324 = ... Hundreds, ... Tens, ... Ones.

Revision (2)

1 Find the result:

753	519	897	970
+ 129	+ 337	- 438	- 238
....	....	....	....

2 Arrange the following:

A 729 , 591 , 314 , 413

Ascendingly: .... , ... , ... , ...

B 423 , 342 , 525 , 995

Descendingly: .... , ... , ... , ...

3 Answer the following:

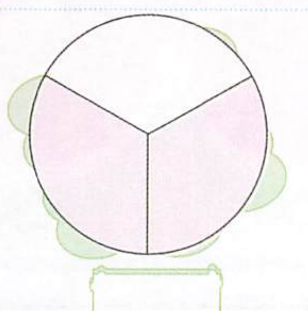
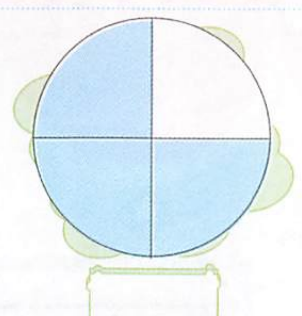
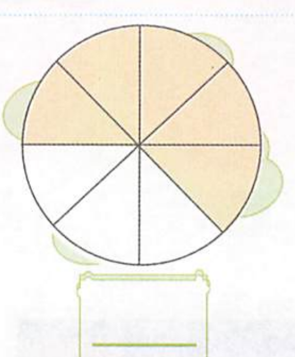
A fruitseller bought 65 kg of bananas and 48 kg of oranges.
Find the total weight of the fruits.

....

....




4 Write the fraction for the colored part of the shape:

5 A Complete:



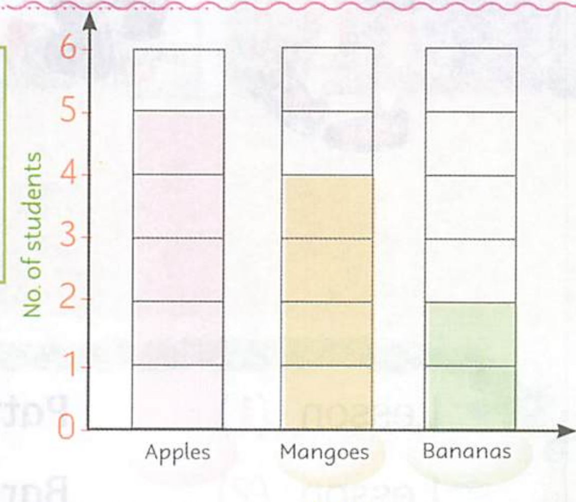

No. of rows: ...., No. of columns: ....

Name of the array = ...

The sum by rows = ...

The sum by columns = ...

B How many more students prefer apples than who prefer bananas? ....



6 Count, then write the total amounts:



....



....

Chapter One



Chapter One Outcomes

Lesson (1)

- Learn the routines of the daily math block.
- Determine the next two elements in a pattern.
- Identify repeating and arithmetic patterns.

Lesson (2)

- Identify elements of a bar graph.
- Organize, represent, and analyze data from a bar graph.

Lesson (3)

- Identify the elements of a pictograph.
- Create a pictograph from a data table.
- Explain the meaning of scale in a pictograph.
- Determine an appropriate graphing question.

Lesson (4)

- Identify the elements of a line plot.
- Create a line plot.
- Collect and record data.

Lessons (5 - 7)

- Discuss centimeter and meter measurement.
- Determine whether to use centimeters or meters to measure length.
- Measure the length of objects in centimeters and meters.
- Use measurement data to create a class line plot.
- Estimate the length of objects in centimeters and meters.
- Demonstrate understanding of the relationship between centimeters and meters.

Lesson (8)

- Demonstrate understanding the centimeters are composed of millimeters.
- Determine whether to use centimeters or meters to measure length.
- Measure the length of objects in millimeters.
- Describe the pattern they observe when measuring the same object in millimeters and centimeters.

Lessons (9,10)

- Use a table to record data.
- Evaluate their personal progress using a checklist.
- Measure the length of objects.
- Explain how they will use their new learning in their daily lives.
- Determine whether to use millimeters, centimeters, or meters to measure length.
- Create a line plot using their collected data.

Chapter (1)
Lesson
(1)

Patterns

Patterns A sequence of shapes, symbols or numbers according to a certain rule.

Visual patterns



1 Circle the shape that comes next:

?

?

?

?



I learnt visual patterns and their rules.



2 Complete as the example:

Lesson 1

Numbers Pattern

Ex: Complete the pattern according to the rule.

1. 2 , 4 , 6 , 8 , 10 , 12 — Rule +2

   Each number increases by 2

2. 20 , 17 , 14 , 11 , 8 , 5 — Rule -3

   Each number decreases by 3



1 Complete the pattern according to the rule:

						Rule
5	10	15	....	....	....	+5
20	40	60	....	....	....	+20
27	30	33	....	....	....	+3
48	46	44	....	....	....	-2
43	46	49	....	....	....	+3
30	28	26	....	....	....	-2

I learnt numerical patterns according to the rule.



2 Find the rule, then complete the patterns:

Rule

2 , 4 , 6 , ... , ... , ...



50 , 45 , 40 , ... , ... , ...



10 , 20 , 30 , ... , ... , ...



42 , 35 , 28 , ... , ... , ...



47 , 45 , 43 , ... , ... , ...



21 , 18 , 15 , ... , ... , ...



16 , 14 , 12 , ... , ... , ...



82 , 92 , 102 , ... , ... , ...



54 , 62 , 70 , ... , ... , ...

92 , 87 , 82 , ... , ... , ...



I learnt to complete patterns and conclude the rule.

Lesson 1

3 Match each pattern to its rule:

						Rule
2	4	6	8	10	○	○ +3
3	6	9	12	15	○	○ +2
65	60	55	50	45	○	○ 
22	19	16	13	10	○	○ 
80	90	100	110	120	○	○ +20
4	24	44	64	84	○	○ -10
40	32	24	16	8	○	○ +10
100	90	80	70	60	○	○ 



4 Draw to complete the pattern, then write the numbers of items in each step:

1	2	3	4	5

4	9	16	25

6	5	4	....

2	4	6	....

3	6	9	....

9	7	5	....

3	6	10	....

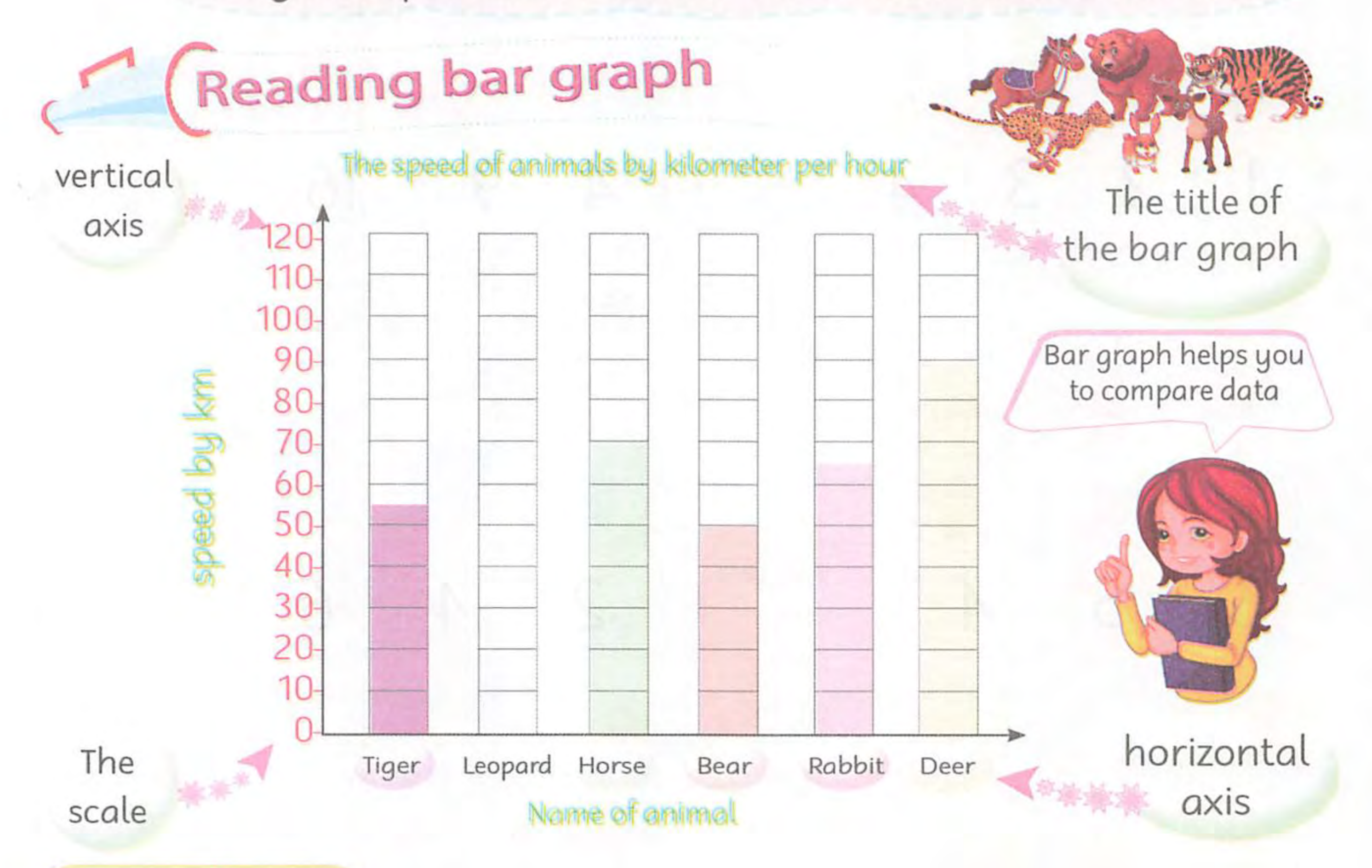
1	4	9	....

Chapter (1)
Lesson
(2)

Bar graph

A way to represent data on vertical or horizontal bars.

Reading bar graph



Complete

1 Which animal is the fastest? ....

2 Which animal is the slowest? ....

3 How fast is the tiger? ....

4 Which animal has the least speed the bear or the rabbit? ....

5 Which animal has the most speed the leopard or the deer? ....

6 Arrange the animals ascendingly according to the speed.

.... , ... , ... , ... , ... , ...

I learnt bar graph elements.



1 Use the bar graph to answer the questions:

Jasmin
Basant
Ful
Dalia
Narges
Sawsan

Flowers

0 5 10 15 20 25 30 35 40 45 50

Number of flowers

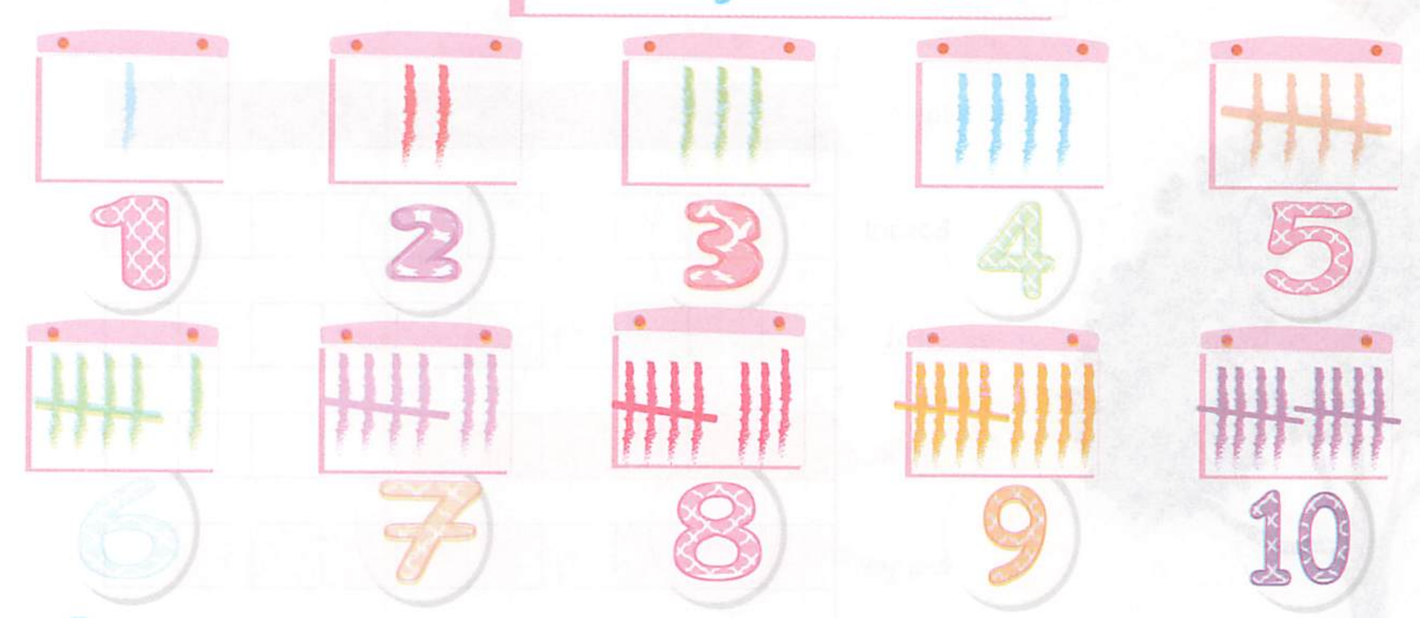
1. What does the bar graph represent? ....
2. What scale did you use? ....
3. How many flowers are the ful? ....
4. What is the least number of flowers? ....
5. What is the greatest number of flowers? ....
6. How many more narges than sawsan? ....
7. Which flower is more than 40 but less than 50? ....
8. What is the total number of flowers? ....
9. Arrange the flowers ascendingly according to their numbers.

.............., ..., ..., ..., ..., ...

I learnt to answer questions about bar graph.

Lesson 2

Tally Marks





A teacher asked his students about their favorite day and he organized the results in a tally table:

Sunday	Monday	Wednesday	Thursday
Monday	Sunday	Thursday	Tuesday
Tuesday	Thursday	Thursday	Wednesday
Wednesday	Thursday	Wednesday	Monday
Thursday	Wednesday	Thursday	Wednesday

Favorite day	Tally	Number
Sunday	||	2
Monday	|||	3
Tuesday	||	2
Wednesday	𝍸 |	6
Thursday	𝍸 ||	7



1 Draw the tally marks that represent each number:

Number	3	5	8	11	16
Tallies					

I learnt to draw tally marks.

2 The picture shows a set of farm animals. Record number of animals using tally marks:



Farm animals

Animal	Tally marks	Number
Horses		
Sheep		
Hens		
Geese		
Cows		

The total numbers of animals =

.... + ... + ... + ... + ... = ...

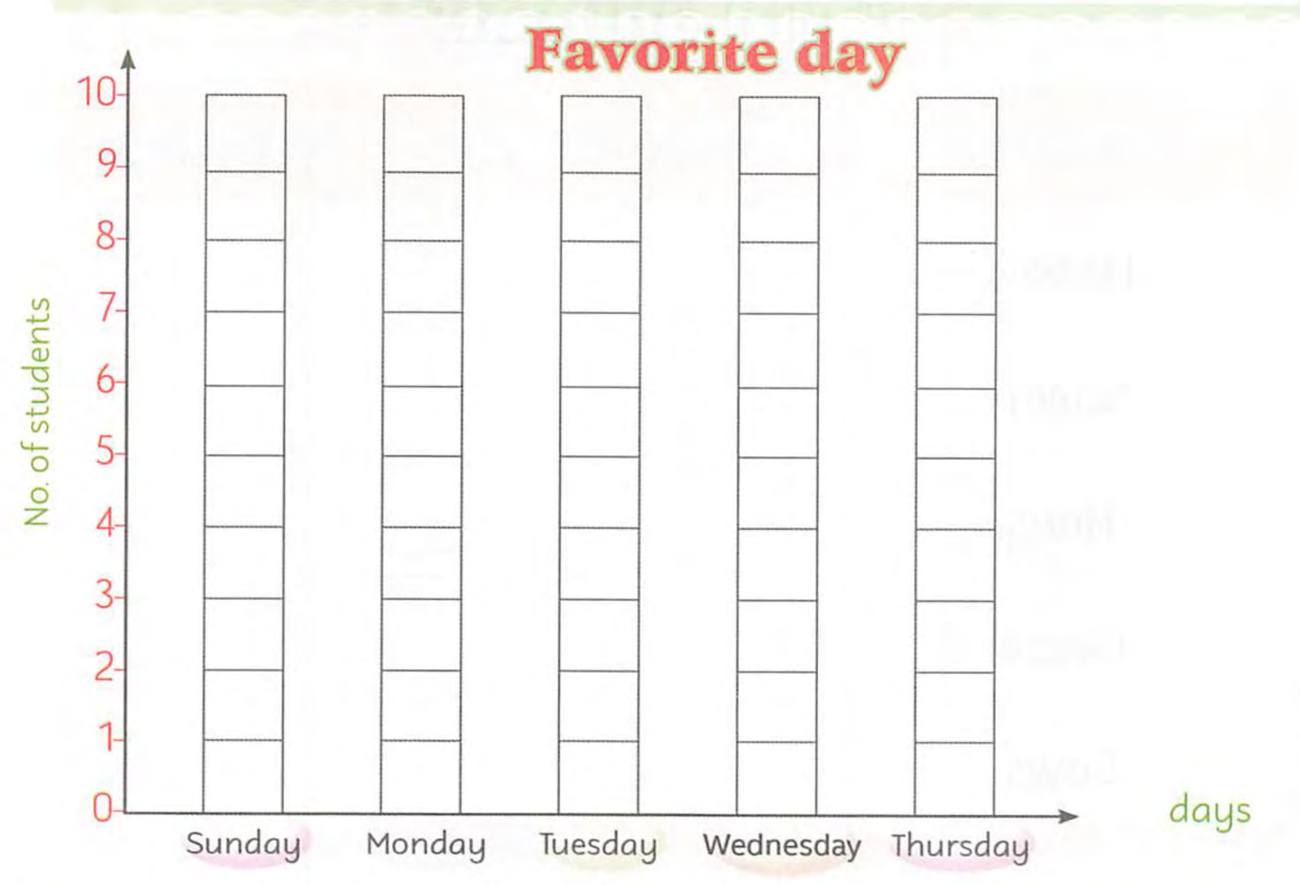
Lesson 2



3 Complete the table, then color the graph to show the data:

Day	Tally marks	No. of students
Sunday	ǀǀ	
Monday	ǀǀǀǀ	
Tuesday	ǀ	
Wednesday	~~ǀǀǀǀ~~ ǀ	
Thursday	~~ǀǀǀǀ~~ ǀǀǀǀ	

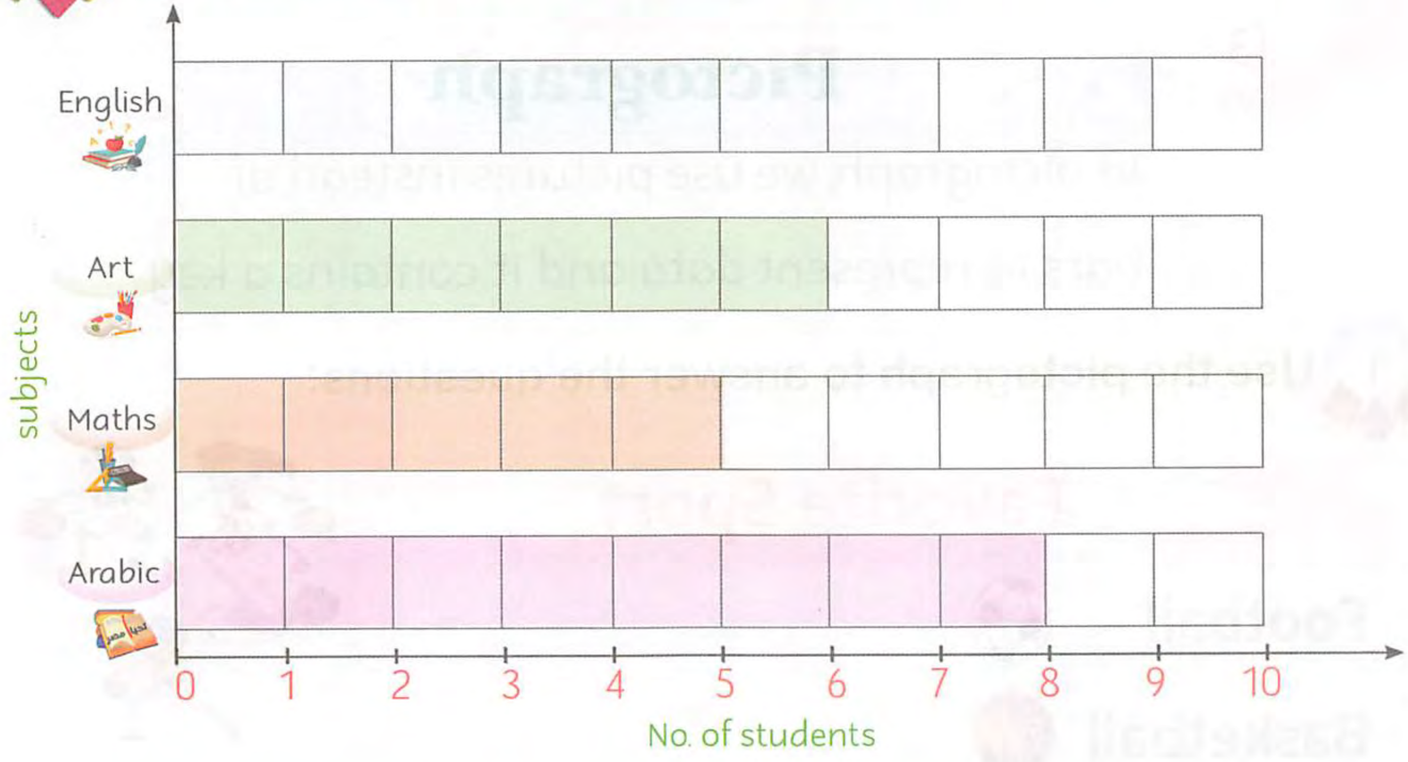
Favorite day



1 The most favorite day for students is ....

2 The least favorite day for students is ....

4 Use the bar graph to complete the table:



Subject	Arabic	Maths	Art	English
Tallies				
No. of students				

1. The most favorite subject is ....
2. The least favorite subject is ....
3. No. of students who preferred maths is less than English by ....
4. Arrange the favorite subjects descendingly according to the number of students.

.... , ... , ... , ...



Pictograph

In pictograph, we use pictures instead of bars to represent data and it contains a key.



1 Use the pictograph to answer the questions:

Favorite Sport

Sport	
Football	☆ ☆ ☆ ☆ ☆
Basketball	☆ ☆
Volleyball	☆ ☆ ☆
Handball	☆ ☆ ☆ ☆

Key
☆ = 2 students

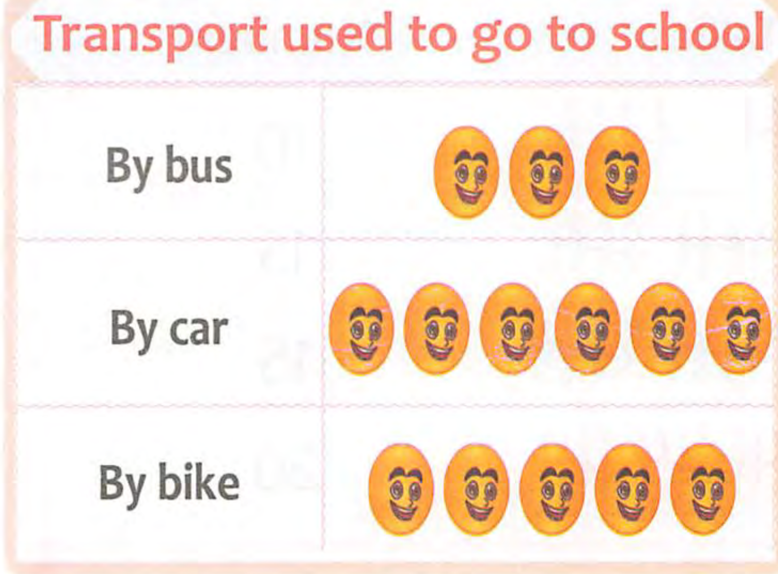
Complete

1. The most favorite sport is ....
2. The least favorite sport is ....
3. How many more students who preferred football than basketball? ....
4. How many less students who preferred basketball than handball? ....
5. Arrange sports ascendingly according to no. of students.

.........., ..., ..., ...

I learnt pictograph, and how to answer questions.

2 Use the pictograph to complete the table, then answer the questions:







Transport	Tallies	Number
By bus		
By car		
By bike		

Answer

1. What is the transport used by most students to go to school? ....
2. What is the transport used by least students to go to school? ....
3. How many students who go to school by car? ....
4. What is the total No. of students who use bus and car? ....
5. What is the difference between No. of students who use the car and those who use the bike? ....



3 Use the table of tally marks that show favorite player to complete the pictograph:

Favorite player	Tallies	Number
Tarek Hamid	𝍸 𝍸	10
Shikabala	𝍸 𝍸 𝍸	15
El-Nenny	𝍸 𝍸 𝍸	15
Mohamed Salah	𝍸 𝍸 𝍸 𝍸	20

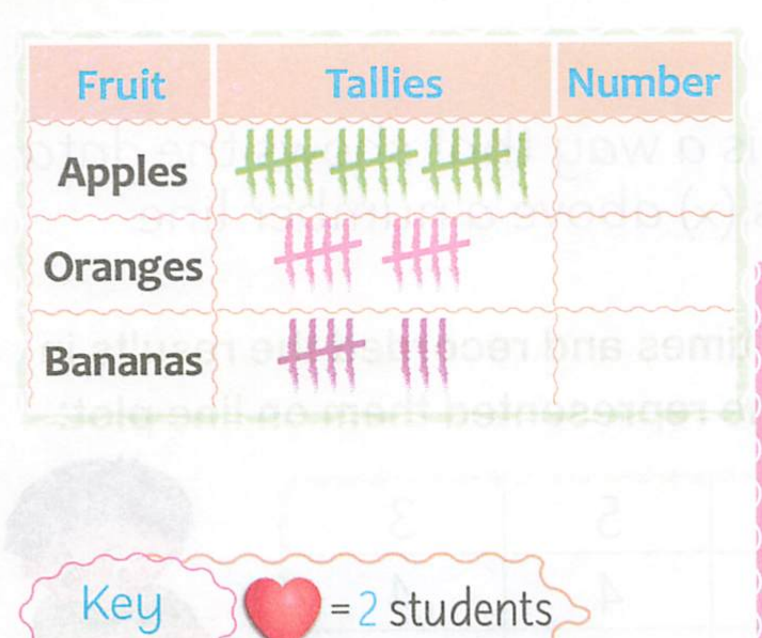
Favorite player	
Tarek Hamid	⚽ ⚽
Shikabala	
El-Nenny	
Mohamed Salah	



1. The most favorite player is ....
2. The least favorite player is ....
3. What is the total number of students who prefer Mohamed Salah and Shikabala? ....
4. How many more students who prefer Mohamed Salah than Tarek Hamid? ....



4 Write the total of tally marks, then complete the pictograph:



Fruit	Tallies	Number
Apples	卌 卌 卌 |	
Oranges	卌 卌	
Bananas	卌 |||	

Key = 2 students



Favorite Fruit	
Apples	
Oranges	
Bananas	



5 Use the pictograph to complete the table of tally marks:



Favorite Birds	
Pigeon	
Hoopoe	
Egret	
Parrot	

Key = 2 students



Birds	Tallies	Number
Pigeon		
Hoopoe		
Egret		
Parrot		

Chapter (1)
Lesson
(4)

Line plot

Line plot It is a way that shows the data as (x) above a number line.



Samir tossed the dice 16 times and recorded the results in the following table, then he represented them on line plot:

1	2	5	3
3	3	4	4
2	6	2	3
4	1	3	6





The Shown Numbers



Key X = 1 Time

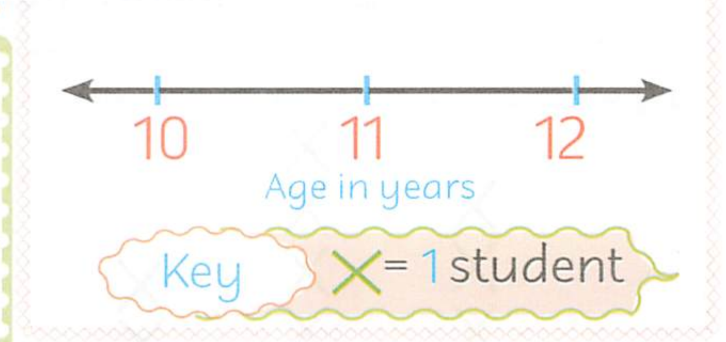


I learnt to create a line plot.

1 Use the data in the table to draw a line plot:

Students' age in years

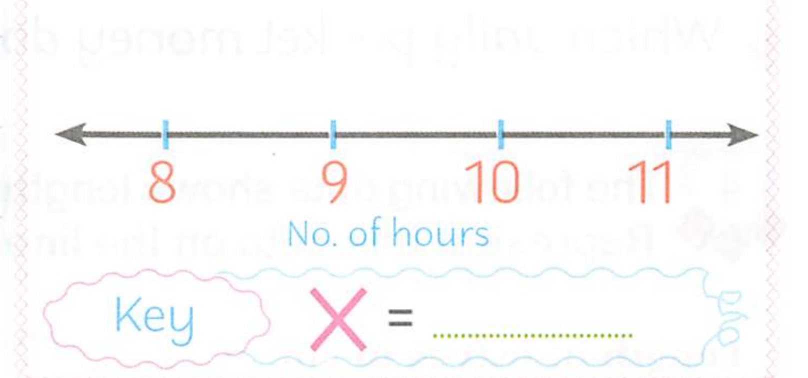
12	10	11	11
11	12	11	10
10	11	12	10



2 Use the data in the table to draw a line plot:

Weekly hours for homework

Hours	Tallies
8	III
9	I
10	卌
11	III

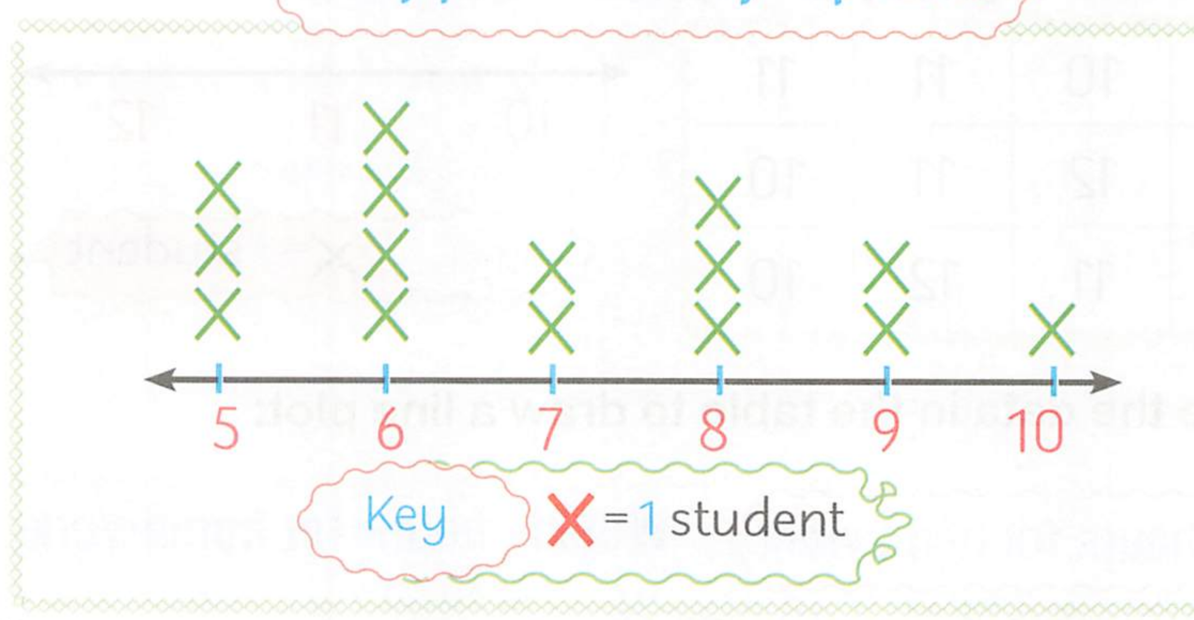




Answer these questions:

1. How many students who spend 10 hours doing homework? ....
2. How many students who spend 11 hours doing homework? ....
3. What time has the least tallies? ....

3 The line plot shows the daily pocket money for number of students:



1 Which daily pocket money do the most students have?

....

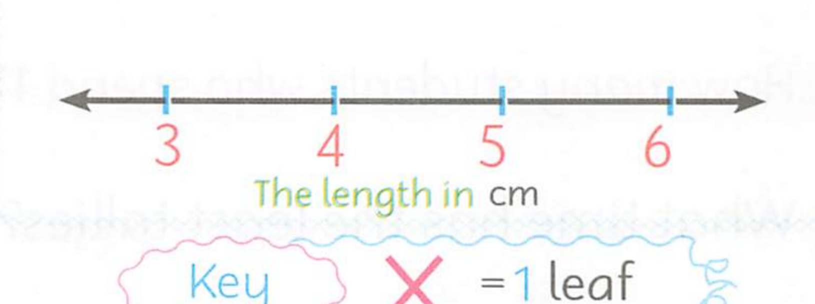
2 Which daily pocket money do the least students have?

....

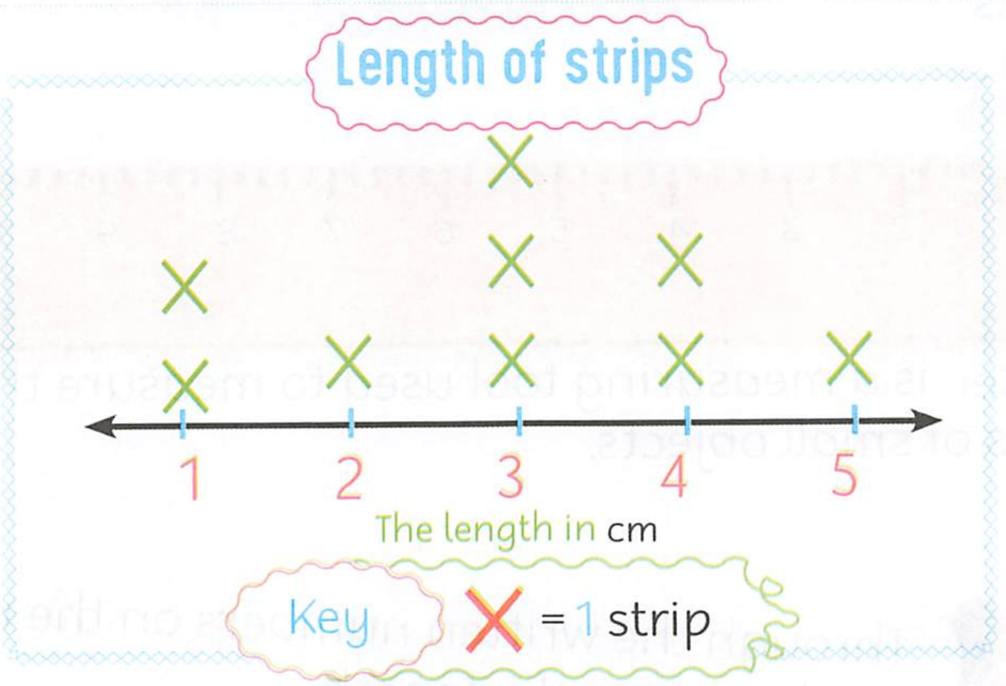
4 The following data shows lengths of some leaves in centimeter. Represent this data on the line plot:

Length of leaves in cm		
3	4	6
5	5	4
3	3	5
4	4	5

Length of leaves in cm



5 Dalia created a line plot for the length of strips she has:

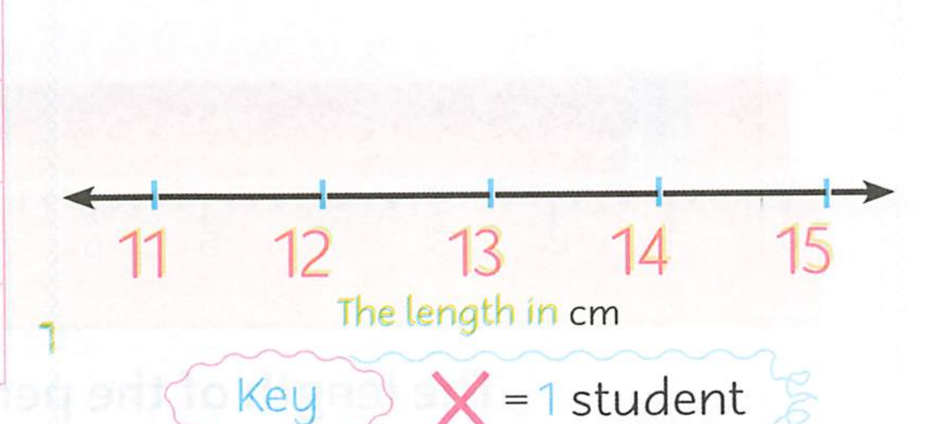


1. Number of strips with length of 3 cm = ...
2. Number of strips with length of 5 cm = ...
3. Dalia has 3 strips with length of .... cm.
4. The total number of strips that Dalia has = ... strips

6 A teacher measured the length of students feet. Represent it on the line plot:

Length of feet in cm

15	13	12	11	12
12	11	14	13	15
12	11	15	11	12
11	13	14	13	15

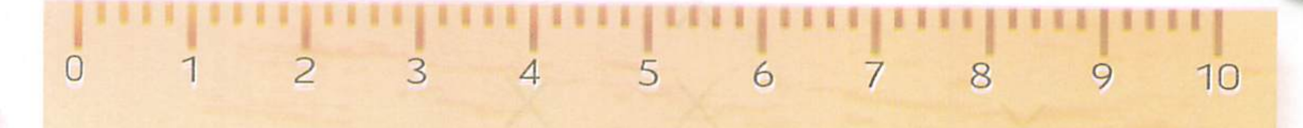






Chapter (1)
Lessons
(5 - 7)

Measuring lengths in centimeter and meter



The ruler: is a measuring tool used to measure the lengths of small objects.



Through the written numbers on the ruler, we determine the length.

The width of the pinky equals about (1 cm)



Centimeter: is the distance between two consecutive numbers

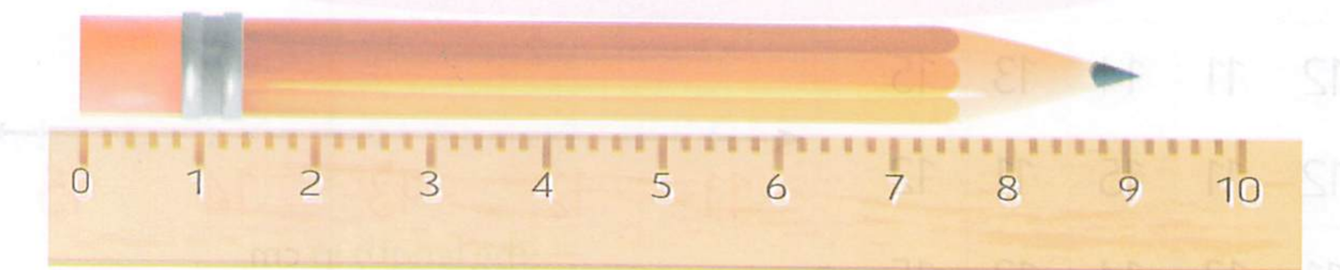
The ruler is divided into small units called centimeters

cm



Line up the edge of the object with the zero mark on the ruler





The length of the pencil = 9 cm

I learnt how to measure using the ruler.



1 Use the ruler to measure the length of each item in cm:

.... cm

.... cm

.... cm

.... cm

.... cm

.... cm

.... cm

.... cm



Lessons 5-7

2 Use the ruler to measure the lengths in centimeters, then compare using (>, < or =):

..................cm ◯ ....cm

..................cm ◯ ....cm

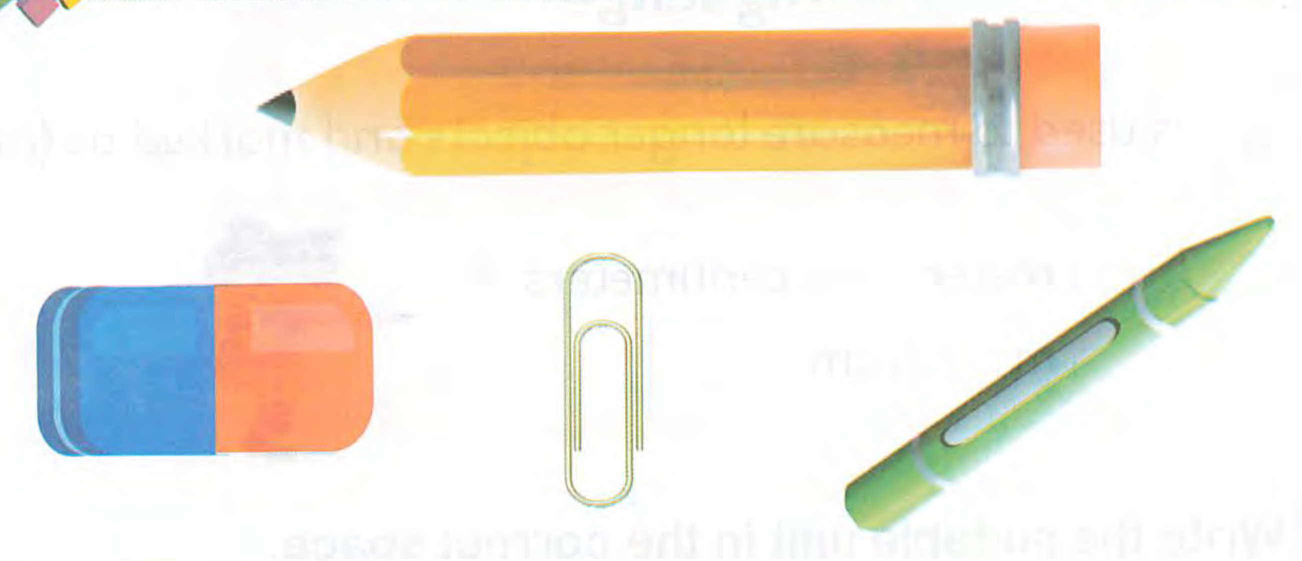
..................cm ◯ ....cm

..................cm ◯ ....cm

..................cm ◯ ....cm

I learnt to compare lengths in centimeters.

3 Use the ruler to measure the lengths in cm, then complete:



A) Complete

1. The length of the pencil = ...
2. The length of the eraser = ...
3. The length of the crayon = ...
4. The length of the clip = ...
5. The longest item is ....
6. The shortest item is ....
7. The total length of the pencil and the eraser = ... cm
8. The difference between the length of the pencil and the crayon = ...

B) Arrange these objects from the shortest to the longest.



Measuring lengths in meter

The meter is used to measure longer objects and marked as (m)



1 meter = 100 centimeters

1 m = 100 cm



1 Write the suitable unit in the correct space:

Meters   Centimeters

I'm the room. My length is 4 ....



I'm the pencil. My length is 13 ....

I'm the table. My length is 2 ....



I'm the football pitch. My length is 50 ....



I'm the nail. My length is 5 ....



I'm the door. My length is 2 ....





2 Circle the suitable unit for measuring the lengths of the following:

cm / m	cm / m
cm / m	cm / m
cm / m	cm / m
cm / m	cm / m



3 Estimate and write the suitable unit (cm - m):



about 3 ....



about 2 ....



about 65 ....



about 11 ....



about 16 ....



about 14 ....



about 15 ....



about 20 ....



about 40 ....



about 18 ....

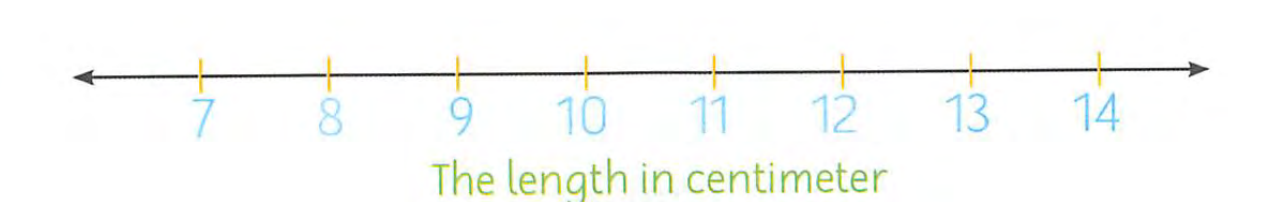
I can estimate the lengths of different objects.

4 Rana measured the lengths of some strings in cm. She recorded the lengths in the following table to determine the most frequent length:

7	10	10	8	9	10	11	10	9
7	12	14	13	12	9	12	9	13
14	13	12	13	14	11	13	11	10
10	13	10	14	12	13	14	12	13

Represent the data on the line plot, then answer the following questions:

Title: ....



The length in centimeter

Key X = ...

1 What is the most frequent length? ....

2 What is the least frequent length? ....

3 Arrange the lengths from the most frequent to the least frequent.

.... , ... , ... , ... , ... , ... , ... , ...

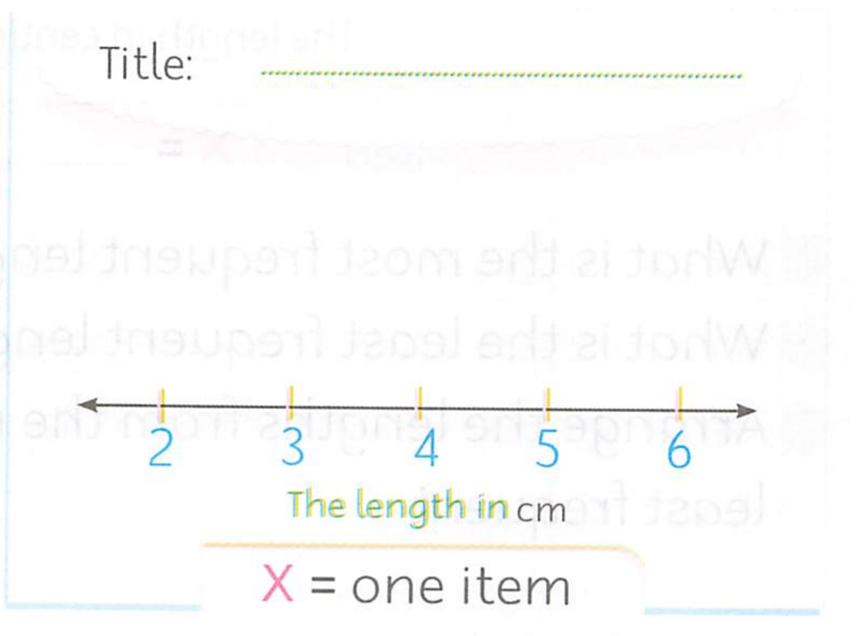


Lessons 5-7



5 **Measure the length of the items, complete the table, then create a line plot for these data:**

Length	Tallies
2	
3	
4	
5	
6	





6 Complete as the example:

600 cm = 6 m	7 m = 700 cm
400 cm = ... m	3 m = ... cm
800 cm = ... m	5 m = ... cm
700 cm = ... m	2 m = ... cm
300 cm = ... m	4 m = ... cm



7 Match the equal lengths as the example:

5 meters	3 meters
400 centimeters	600 centimeters
8 meters	500 centimeters
6 meters	800 centimeters
300 centimeters	4 meters

Chapter (1)
Lesson
(8)

Measuring lengths in millimeter



Millimeter

It is a length measuring unit used to measure very small objects. It's a very small part of the centimeter. It's about the width of the point of the end of your pencil.





1 centimeter = 10 millimeters
1 cm = 10 mm



1 Complete as the example:

1 centimeter = 10 millimeters
2 centimeters = ... millimeters
3 centimeters = ... millimeters
4 centimeters = ... millimeters
5 centimeters = ... millimeters

6 centimeters = ... millimeters
7 centimeters = ... millimeters
8 centimeters = ... millimeters
9 centimeters = ... millimeters
10 centimeters = ... millimeters

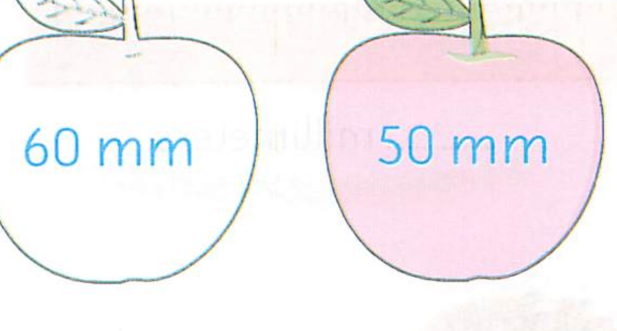
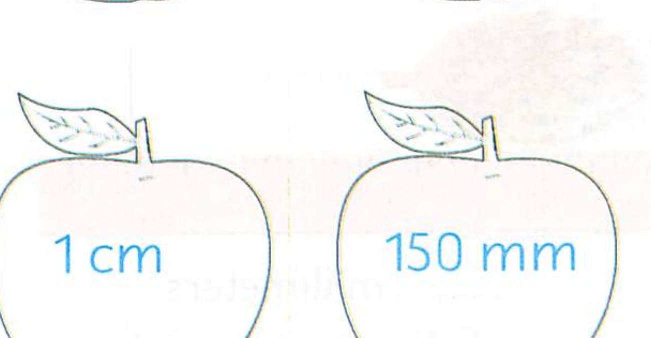


I learnt the relation between centimeter and millimeter.

2 Complete as the example:

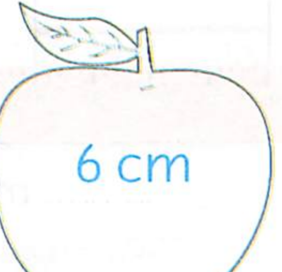
70 mm = 7 cm	100 mm = ... cm
90 mm = ... cm	60 mm = ... cm
80 mm = ... cm	170 mm = ... cm
10 mm = ... cm	150 mm = ... cm

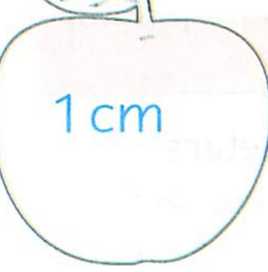
3 Color each two equal lengths in the same color as the example:







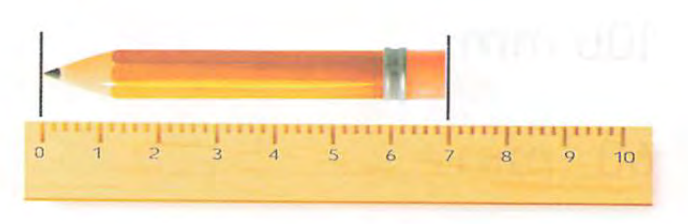




5 cm	10 mm	3 cm	90 mm
30 mm	15 cm	60 mm	50 mm
9 cm	6 cm	1 cm	150 mm



Lesson 8

4 Write the length of the following objects:



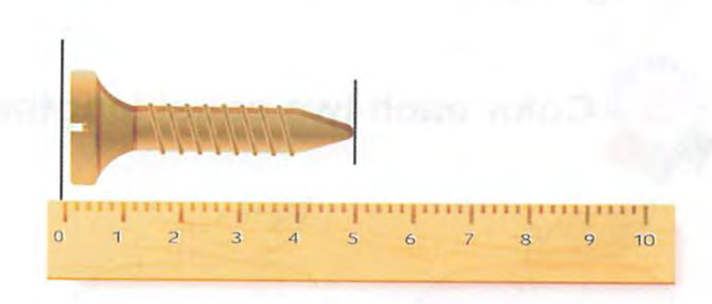
.... millimeters



.... millimeters



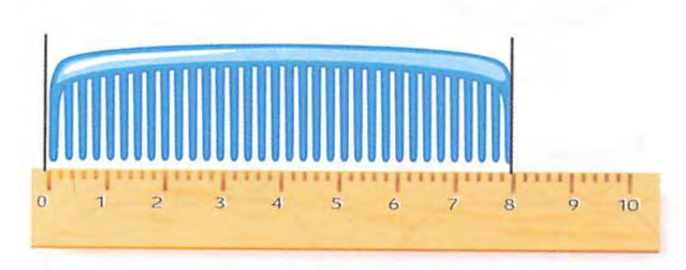
.... millimeters



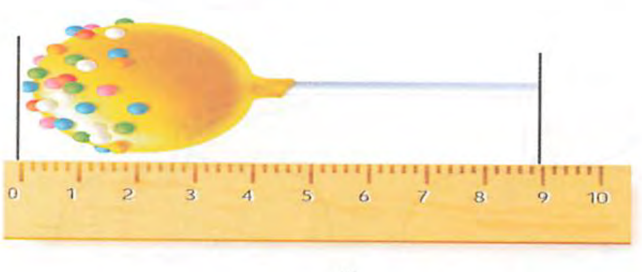
.... millimeters



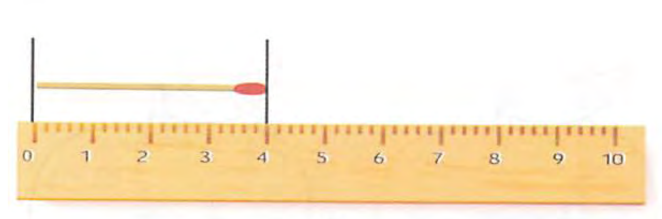
.... millimeters



.... millimeters



.... millimeters



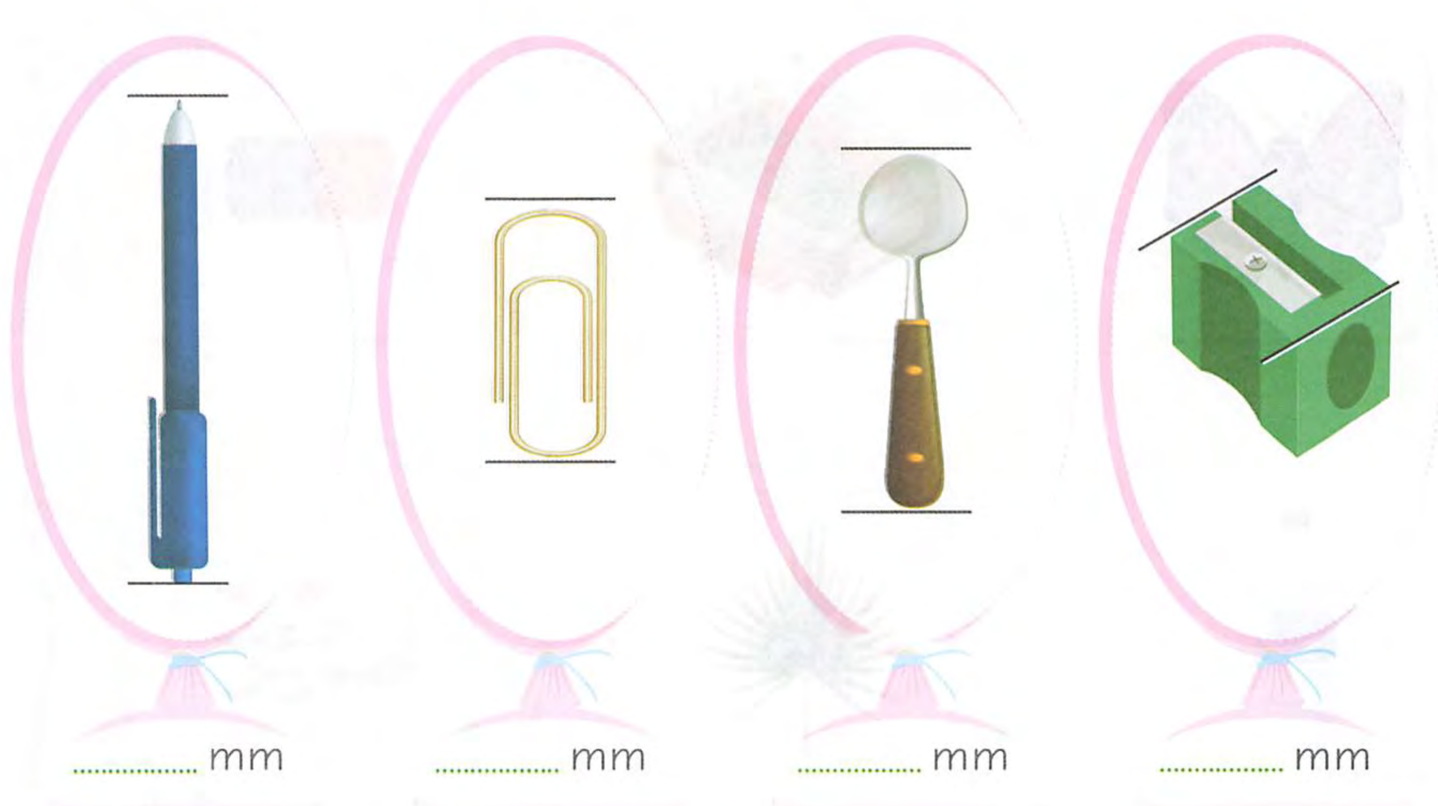
.... millimeters

I can measure lengths in millimeter.



5 Use the ruler to measure the lengths in millimeter:

.... mm .... mm .... mm .... mm







Circle the suitable measuring unit for each item:

cm m	mm m	m cm
cm mm	cm m	m mm
mm m	cm m	mm cm
m cm	mm m	mm cm

Measuring lengths

Chapter (1) Lessons (9 , 10)



1 **Use the ruler to measure the lengths of the following lines as the example:**

4 cm = 40 mm

...... cm = ... mm

...... cm = ... mm

...... cm = ... mm

...... cm = ... mm

...... cm = ... mm

...... cm = ... mm

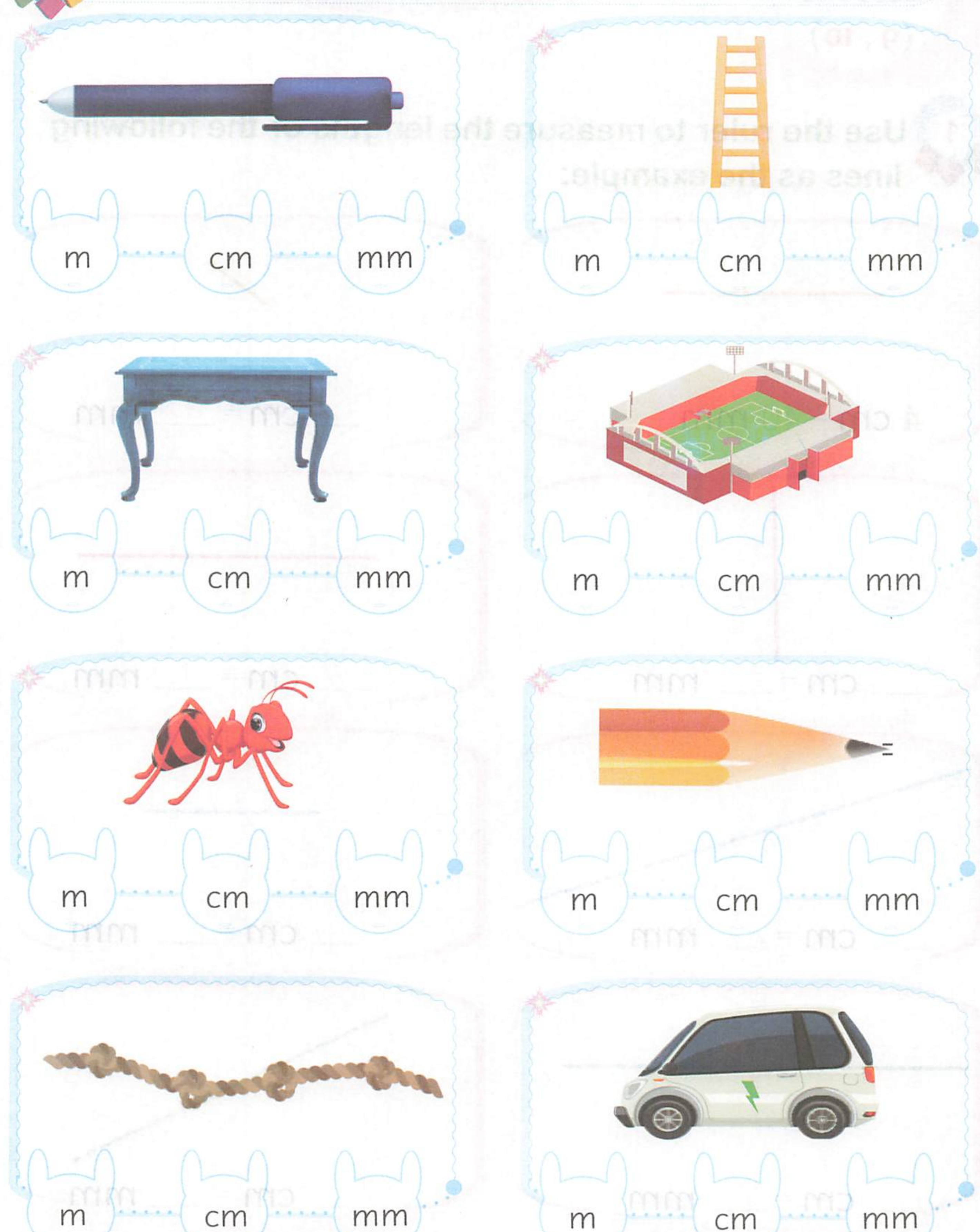
...... cm = ... mm



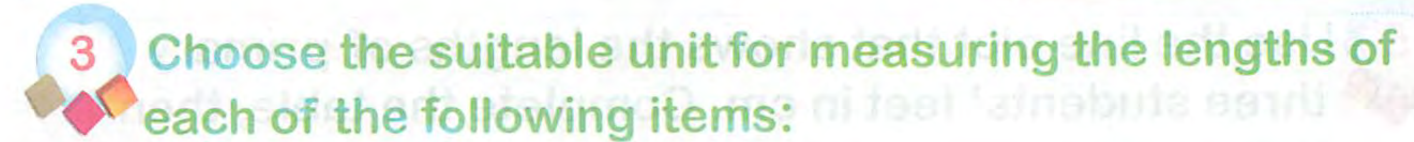
I can convert from cm into mm.

Lessons 9,10

2 Shade the suitable measuring unit for each object:



I learnt to choose among meter, centimeter and millimeter.



3 Choose the suitable unit for measuring the lengths of each of the following items:

1. Flag pole height (mm - cm - m)
2. Crayon length (mm - cm - m)
3. Insect length (mm - cm - m)
4. Pencil tip width (mm - cm - m)
5. Car length (mm - cm - m)
6. Book width (mm - cm - m)

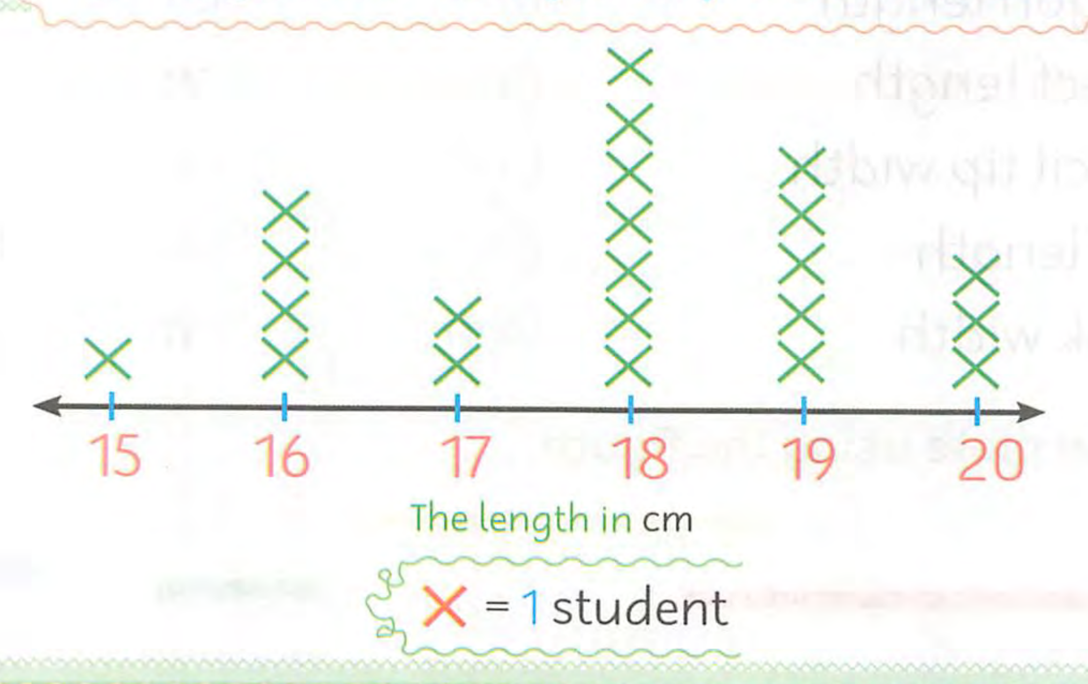
4 Complete using the figure:



1. The length of the blue line = ... cm
2. The length of the red line = ... cm
3. The length of the yellow line = ... cm
4. The length of the green line = ... cm
5. The total length of the blue and yellow lines = ... cm
6. The difference between the lengths of the red and yellow lines = ... cm
7. We need .... blue lines to be equal to the yellow line.

5 Use the line plot that shows the lengths of primary three students' feet in cm. Complete the table, then answer the questions:

The length of feet of primary three students



Length in centimeters	15	16	17	18	19	20
No. of students						

1. How long are the feet of most students? ....
2. How long are the feet of the least students? ....
3. How many students that have feet length of 16 cm? ....
4. What are the two lengths that have the total number of 12 students? ....
5. What's the difference between students with the greatest and the least length of feet?

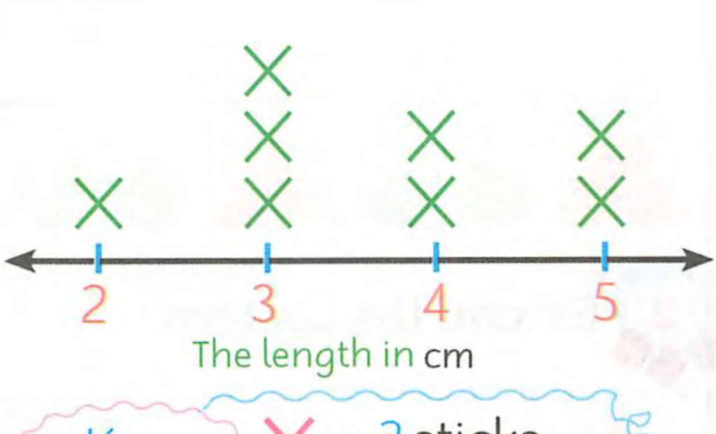
....



6 Notice the line plot, then answer:



- How many sticks that have a length of 4 cm?
  No. of sticks = ...
- No. of sticks with the greatest length = ...
- No of sticks with the least length = ...

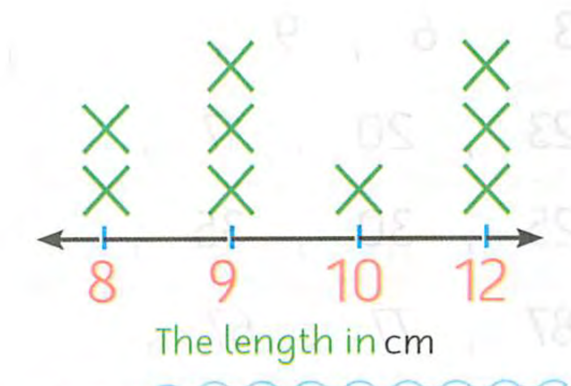




7 Use the line plot to answer the questions:



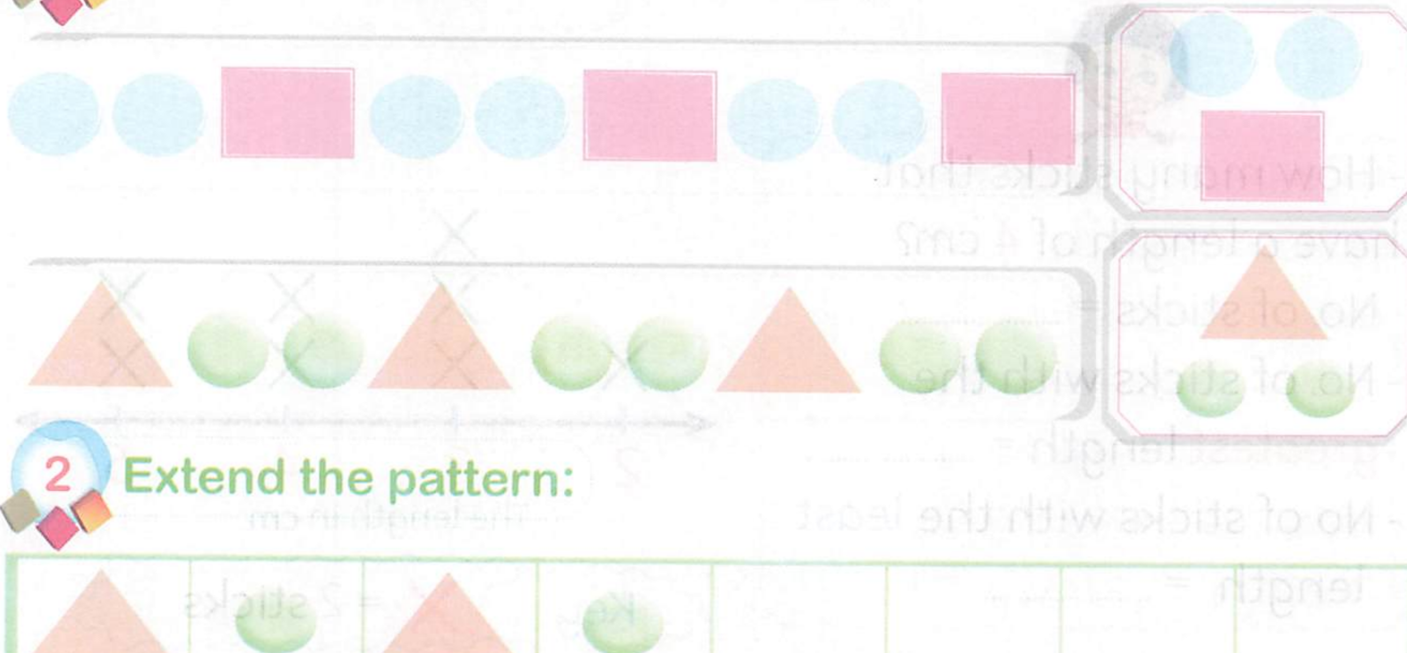
- How many wings that have a length of 12 cm?
  No. of wings = ... wings
- No. of wings with the greatest length = ...
- No. of wings with the least length = ...



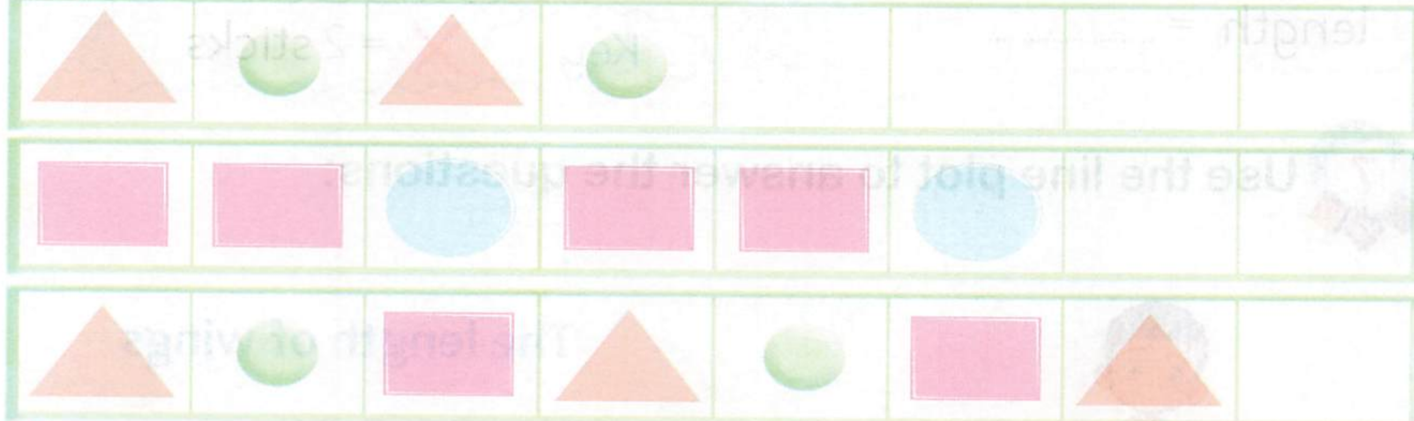
Review on Chapter One



1 Circle the figure that comes next:



2 Extend the pattern:





3 Find the pattern rule, then complete:

3 , 6 , 9 , ... , ... , ... , ... , ...

23 , 20 , 17 , ... , ... , ... , ... , ...

25 , 30 , 35 , ... , ... , ... , ... , ...

87 , 77 , 67 , ... , ... , ... , ... , ...

37 , 47 , 57 , ... , ... , ... , ... , ...

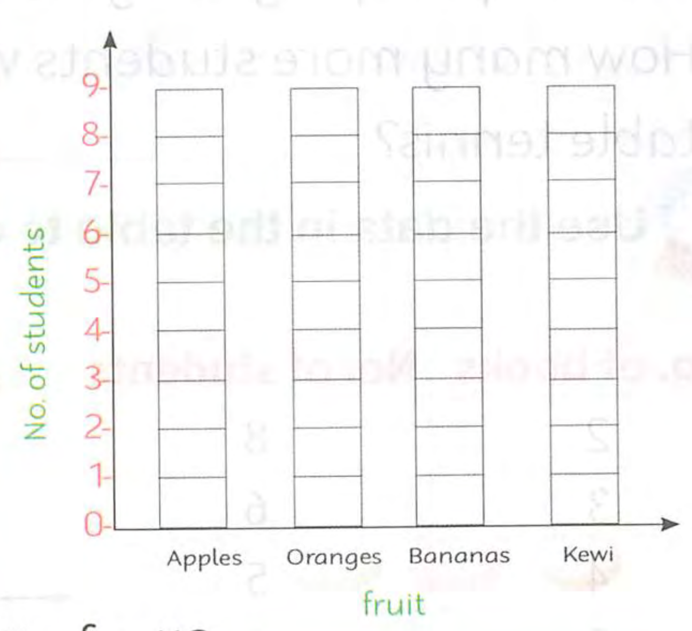
12 , 20 , 28 , ... , ... , ... , ... , ...



4 **This is a survey about favorite fruit. Make a tally table, then use it to color the bar graph:**

apple	banana	apple
orange	apple	kewi
apple	apple	orange
banana	banana	apple
banana	apples	orange
orange	orange	kewi

Fruits	Tallies	Number
Apples		
Oranges		
Bananas		
Kewi		



1 What is the most favorite fruit? ....

2 What is the least favorite fruit? ....

3 Arrange the fruit according to the number of students ascendingly.

.... , ... , ... , ...

Review



5 Use the pictograph to complete the table of tally marks, then answer:



Sport	Tallies	Number
Football		
Basketball		
Volleyball		
Table tennis		

Key: Each ● = 2

1. How many students who play football? ....
2. Which sport played by 4 students? ....
3. How many more students who prefer football than table tennis? ....

6 Use the data in the table to create a line plot:

No. of books	No. of students
2	8
3	6
4	5
5	4
6	1

Books read that day

Key: Each X = 1 student

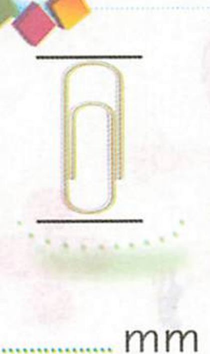
1. No. of students who read 3 books = ...
2. The total number of students who read 4 and 5 books = ...

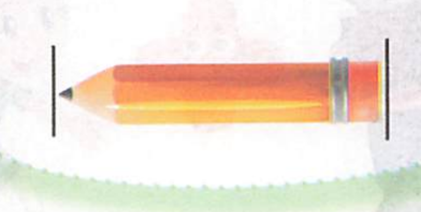


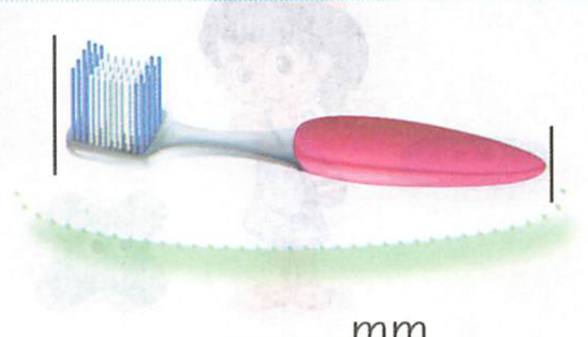
7 Circle the suitable unit for measuring lengths of the following:



8 Use the ruler to measure the lengths of the following objects:







.... mm .... cm .... mm



9 Complete:

1 meter = ... centimeters

30 centimeters = ... millimeters

100 millimeters = ... centimeters

400 centimeters = ... meter

400 millimeters = ... centimeters

12 centimeters = ... millimeters

5 meters = ... centimeters

80 centimeters = ... millimeters

Chapter Two



Chapter Two Outcomes

Lesson (11)

- Explain how value of a digit can change based on its place value.
- Apply strategic thinking to construct a four-digit number with a high value.

Lessons (12,13)

- Read and write numbers up to Thousands place in a standard form. - Compare numbers using symbols
- Read and write numbers up to the Thousands place in expanded form.
- Read and write numbers up to the Hundred Thousands place.
- Create visual models of numerical value.
- Compare and order numbers up to the Hundred Thousands place.

Lesson (14)

- Skip count by 2s, 5s or 10s. - Read and write numbers up to the Hundred Thousands in standard form.
- Read and write numbers up to the Hundred Thousands in standard and expanded forms.
- Order a set of numbers up to the Hundred Thousands place.

Lessons (15,16)

- Identify and practise strategies for counting sets of objects.
- Explain the strategies they used to calculate the total number of items in an array.
- Use a variety of strategies to calculate the total number of items in an array.

Lessons (17,18)

- Skip count by(3s). - Compare arrays to equal groups.
- Use drawing,arrays,equations and physical models to solve repeated addition and multiplication problems.
- Express repeated addition problems as multiplication problems.
- Explain how repeated addition and multiplication equations are related.
- Compare numbers using symbols. - Explain products of whole numbers.
- Compare two products using greater than, less than, and equal to symbols.

Lessons (19,20)

- Solve multiplication problems using arrays.
- Create arrays to model the commutative property of multiplication.
- Investigate commutative property of multiplication using arrays.
- Explain multiplication and the commutative property of multiplication.
- Think strategically to solve a mathematical problem. - Use arrays to solve a real-world problem.

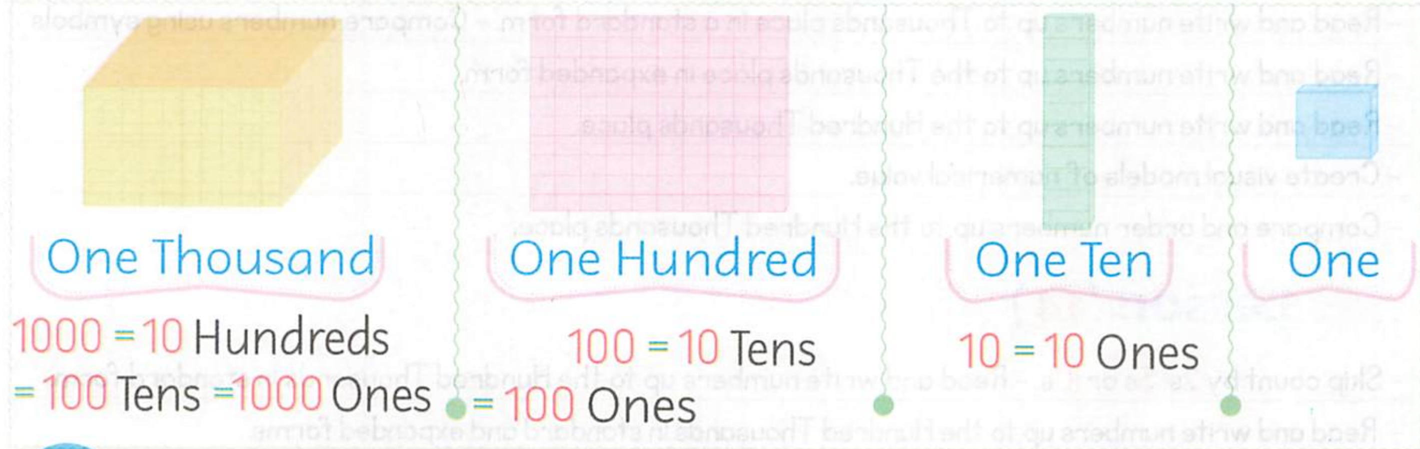
Chapter (2)
Lesson (11)

Thousands



The smallest 4-digit number is (1000)

999 + 1 = 1000





Write the number as the example:

2000 + 200 + 40 + 3 = 2243

.... + ... + ... + ... = ...

.... + ... + ... + ... = ...

I learnt thousands.

Notice and learn

Number = 7435

Thousands	Hundreds	Tens	Ones
7	4	3	5

7 Thousands , 4 Hundreds, 3 Tens, 5 Ones

7000 + 400 + 30 + 5 = 7435

It's read seven thousand, four hundred, thirty-five

1 Write the place value for the digit in red.

Number	Place value
3694	
7242	
3753	

Number	Place value
7945	
2321	
1972	



2 Write the value for the digit in red.

Number	Value
2615	
6735	
9127	
2137	

Number	Value
1921	
3645	
2132	
9142	

Lesson 11



3 Complete the table:

Number	Thousands	Hundreds	Tens	Ones
3765				
6517				
9475				
	2	5	4	6
	5	2	0	3
	8	6	7	2



4 Write in expanded form as the example:

4562 = 4000 + 500 + 60 + 2

9412 = ... + ... + ... + ...

5041 = ... + ... + ...

7002 = ... + ...

6429 = ... + ... + ... + ...

8975 = ... + ... + ... + ...

1025 = ... + ... + ...

I can write numbers in the expanded form.



5 Write in standard form as the example:

2000+300+40+6 = 2346

6000+800+70+2 = ...

8000+50+4 = ...

8000+400+10+9 = ...

4000+60 = ...

3000+700+5 = ...

3000+800+90+9 = ...



6 Complete as the example:

3475 = 3 Thousands, 4 Hundreds, 7 Tens , 5 Ones.

9632 = ...Thousands, ... Hundreds, ...Tens , ... Ones.

.... = 7 Thousands, 5 Hundreds, 4 Tens , 6 Ones.

.... = 9 Thousands, 6 Tens , 8 Ones.

.... = 8 Thousands , 6 Ones.

.... = 9 Thousands , 8 Tens.







7 Compare using (> , < or =):

999	☐	1111
9 + 4 + 2 + 1	☐	9421
8000 + 900 + 80 + 6	☐	8986
725 + 6000	☐	6275
3907	☐	7907
6 Thousands	☐	607
3 Thousands, 9 Hundreds	☐	3009
10 Hundreds	☐	1 + 999



8 Create the greatest and smallest number as the example:

Digits	The greatest number	The smallest number
9 , 0 , 1 , 2	9210	1029
4 ,9 ,7,8		
6 ,1 ,8 ,7		
4 ,7 ,9 ,5		
6 ,8 ,7,4		
1, 3 , 2 ,5		
4 , 0 , 2 , 3		
8 , 0 , 2 ,6		



9 Arrange the following numbers ascendingly:

6589 , 6889 , 6599 , 6879

The order is: .... , ... , ... , ...

1111 , 1011 , 1001 , 4167

The order is: .... , ... , ... , ...

6589 , 2819 , 2612 , 345

The order is: .... , ... , ... , ...

7512 , 5721 , 7002 , 2007

The order is: .... , ... , ... , ...

10 Arrange the following numbers descendingly:

9865 , 9868 , 9965 , 9786

The order is: .... , ... , ... , ...

3601 , 3061 , 3160 , 3116

The order is: .... , ... , ... , ...

1429 , 5136 , 3244 , 4168

The order is: .... , ... , ... , ...

6415 , 4615 , 5216 , 6125

The order is: .... , ... , ... , ...

Lesson 11



11 Write the number in word form as the example:

1. 8615 Eight thousand, six hundred fifteen.
2. 6932 ....
3. 4667 ....
4. 8916 ....
5. 2315 ....
6. 3212 ....

12 Write the number in standard form as the example:

1. Four thousand, eight hundred fifteen = 4815
2. Six thousand, four hundred twenty = ...
3. Eight thousand, nine hundred fifty-four = ...
4. Six thousand, five hundred twenty-nine = ...
5. Nine thousand, six hundred sixty-three = ...
6. Five thousand, four hundred = ...

13 Complete as the example:

5000 = 5 Thousands	5000 = ... Hundreds
5000 = ... Tens	3000 = ... Thousands
90 Tens = ... Hundreds	70 Hundreds = ... Tens

Chapter (2)
Lessons
(12,13)

Ten thousands

(10000) is the smallest 5-digit number

Number = 89456

Ten thousands	Thousands	Hundreds	Tens	Ones
8	9	4	5	6

8 Ten thousands, 9 Thousands, 4 Hundreds, 5 Tens, 6 Ones

80000 + 9000 + 400 + 50 + 6

It is read eighty nine thousand, four hundred fifty-six



1 Write the place value for the digit in red:

Number	Place value
23532	
76287	
45632	

Number	Place value
18452	
36715	
98526	



2 Write the value for the digit in red:

Number	Value
53217	
87975	
65432	
89652	

Number	Value
32708	
75432	
67315	
81542	

I learnt the ten thousands.



3 Complete the table:

Number	Ten thousands	Thousands	Hundreds	Tens	Ones
45652					
38217					
56825					
	7	8	2	0	4
	2	9	5	0	4
	3	7	2	5	3



4 Write in expanded form for the following numbers as the example:

53216 = 50000 + 3000 + 200 + 10 + 6

32657 = ______ + ______ + ______ + ______ + ______

97174 = ______ + ______ + ______ + ______ + ______

84287 = ______ + ______ + ______ + ______ + ______

56002 = ______ + ______ + ______ + ______ + ______

78420 = ______ + ______ + ______ + ______ + ______

10275 = ______ + ______ + ______ + ______ + ______



5 Write the number in standard form as the example:

20000 + 5000 + 400 + 70 + 3 = 25473

90000 + 6000 + 300 + 80 + 6 = ...

80000 + 6000 + 50 + 2 = ...

70000 + 40 + 7 = ...

60000 + 4000 + 700 + 5 = ...

40000 + 500 + 60 + 8 = ...

30000 + 1000 + 10 + 8 = ...

6 Complete as the example:

65431 = 6 Ten thousands, 5 Thousands, 4 Hundreds, 3 Tens, 1 Ones

48652 = ...Ten thousands, ...Thousands, ...Hundreds, ...Tens, ...Ones

59387 = ...Ten thousands, ...Thousands, ...Hundreds, ...Tens, ...Ones

.... = 7 Ten thousands, 5 Thousands, 6 Tens, 8 Ones

.... = 4 Ten thousands, 7 Thousands, 8 Tens

.... = 7 Ten thous 6 Tens, 2 Ones

.... = 7 Ten thousands, 9 Hundreds

.... = 9 Thousands, 9 Ones



I can write numbers in the expanded, standard and word forms.



7 Compare using (> , < or =):

4732	☐	40732	97425	☐	96425
75652	☐	75562	256	☐	48256
37405	☐	50473	91457	☐	9145
34000+600+80+7	☐	34687	62675	☐	62657



8 Create the greatest and the smallest number as the example:

Digits	The greatest number	The smallest number
9 , 5 , 4 , 6 , 3	96543	34569
7 , 1 , 6 , 3 , 8		
8 , 4 , 6 , 5 , 2		
5 , 4 , 2 , 7 , 3		
2 , 6 , 4 , 2 , 5		
2 , 3 , 1 , 4 , 6		
3 , 4 , 7 , 9 , 0		
4 , 6 , 1 , 2 , 8		
9 , 8 , 7 , 5 , 6		

I can compare and create numbers.

9 Arrange the following numbers ascendingly:

24652 , 38602 , 52565 , 47625

The order is: .... , ... , ... , ...

13725 , 11025 , 1005 , 13275

The order is: .... , ... , ... , ...

34852 , 43258 , 85342 , 58432

The order is: .... , ... , ... , ...

34852 , 62825 , 82562 , 62715

The order is: .... , ... , ... , ...

10 Arrange the following numbers descendingly:

25137 , 25011 , 50012 , 32178

The order is: .... , ... , ... , ...

25682 , 28256 , 25862 , 28625

The order is: .... , ... , ... , ...

53227 , 15276 , 35227 , 15726

The order is: .... , ... , ... , ...

79415 , 53297 , 2462 , 24625

The order is: .... , ... , ... , ...

I can arrange a set of five-digit numbers.

Lessons 12,13

11 Write the numbers in word form as the example:

1. 28415 Twenty eight thousand, four hundred fifteen
2. 96824 ....
3. 58479 ....
4. 36253 ....
5. 79468 ....
6. 14695 ....
7. 12005 ....

12 Write the number in standard form as the example:

1. Twenty-seven thousand, five hundred twenty-four =27524
2. Fifty-eight thousand, four hundred fifty-three =..........
3. Sixty-five thousand, nine hundred sixty-four =..........
4. Sixty-seven thousand, nine hundred sixty-four =..........
5. Ninety thousand, six hundred fourteen =..........
6. Forty-five thousand, nine hundred five =..........
7. Thirty-four thousand, two hundred forty-nine =..........
8. Forty-eight thousand, eighty =..........

Chapter (2) Lesson (14)

Hundred thousands

Notice and learn

99999 + 1 = 100000

(100000) is the smallest 6-digit number

453276

Hundred Thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	5	3	2	7	6

..4.. Hundred thousands, ..5.. Ten thousands, ..3.. Thousands, ..2.. Hundreds, ..7.. Tens and ..6.. Ones

400000 + 50000 + 3000 + 200 + 70 + 6

It is read Four hundred fifty-three thousand, two hundred seventy-six.

1 Write the place value for the digit 5 in each number:

Number	Place value
352673	
613546	
149635	

Number	Place value
167352	
523463	
765984	

2 Write the value for the digit 7 in each number:

Number	Value
752693	
327142	
135273	

Number	Value
271549	
562714	
256417	

I learnt to read a 6-digit numbers.



3 Complete the table as the example:

Number	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
645327	6	4	5	3	2	7
68328						
324217						
778359						
40053						
3524						
600006						



4 Complete the table as the example:

Number	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
264531	2	6	4	5	3	1
	200000 +	60000 +	4000 +	500 +	30 +	1
570432						
	+	+	+	+	+	
689543						
	+	+	+	+	+	
478051						
	+	+	+	+	+	



5 Write the number in standard form as the example:

300000 + 20000 + 5000 + 400 + 80 + 6 = 325486

500000 + 30000 + 2000 + 500 + 70 + 5 = ...

600000 + 70000 + 3000 + 100 + 40 + 7 = ...

800000 + 10000 + 6000 + 400 + 90 + 8 = ...

30000 + 1000 + 600 + 10 + 9 = ...

70000 + 4000 + 700 + 30 + 4 = ...

700000 + 8000 + 500 + 50 + 5 = ...

900000 + 7000 + 900 + 70 + 7 = ...

400000 + 4000 + 400 + 90 + 8 = ...



6 Write the following number in expanded form as the example:

62319 = 60000 + 2000 + 300 + 10 + 9

495732 = ... + ... + ... + ... + ... + ...

79035 = ... + ... + ... + ... + ...

43212 = ... + ... + ... + ... + ...

398475 = ... + ... + ... + ... + ... + ...

864231 = ... + ... + ... + ... + ... + ...

Lesson 14



7 Compare using (> , < or =):

376257	☐	385672
625916	☐	625000 + 916
679872	☐	534782
452138	☐	452000 + 318
287328	☐	287300 + 18
7000 + 500 + 30 + 2	☐	7532



Fifty-four thousand, Three hundred nine ☐ 900354



Twenty-four thousand, five hundred eight ☐ 524800





8 Create the greatest and the smallest digit number:

Digits	The greatest number	The smallest number
9, 5, 3, 7, 2, 6		
8, 9, 0, 3, 0, 1		
7, 9, 0, 3, 5, 2		
5, 9, 2, 3, 7, 4		
2, 3, 1, 7, 8, 5		
1, 4, 5, 3, 7, 2		
9, 5, 6, 3, 0, 1		

I can compare two 6-digit numbers.



9 Arrange the following numbers ascendingly:

26875 , 268752 , 267852 , 265872

The order is: .... , ... , ... , ...

625816 , 625186 , 625168 , 625618

The order is: .... , ... , ... , ...

472815 , 742835 , 472185 , 742581

The order is: .... , ... , ... , ...

984716 , 984176 , 897416 , 987416

The order is: .... , ... , ... , ...

10 Arrange the following numbers descendingly:

285619 , 285916 , 825691 , 825961

The order is: .... , ... , ... , ...

567413 , 567143 , 486243 , 684243

The order is: .... , ... , ... , ...

162786 , 162687 , 687261 , 687621

The order is: .... , ... , ... , ...

11 Write in word form:

1. 672563 ....
2. 847275 ....
3. 728023 ....

I can arrange six-digit numbers.

Lesson 14

12 Write in standard form:

1. Seven hundred ninety-five thousand, four hundred ninety-five = ...
2. Nine hundred thirty-six thousand, six hundred thirty-four = ...
3. Five hundred forty thousand = ...
4. Nine hundred eighty thousand, five = ...
5. Eight hundred forty thousand, eighty-nine = ...

13 Skip count by (2s):

1. 2, 4, 6, ..., ..., ..., ...
2. 6, 8, 10, ..., ..., ..., ...
3. 10, 12, 14, ..., ..., ..., ...
4. 14, 16, 18, ..., ..., ..., ...

14 Skip count by (5s):

1. 5, 10, 15, ..., ..., ..., ...
2. 15, 20, 25, ..., ..., ..., ...
3. 20, 25, 30, ..., ..., ..., ...
4. 30, 35, 40, ..., ..., ..., ...

15 Skip count by (10s):

1. 10, 20, 30, ..., ..., ..., ...
2. 30, 40, 50, ..., ..., ..., ...
3. 20, 30, 40, ..., ..., ..., ...
4. 50, 60, 70, ..., ..., ..., ...

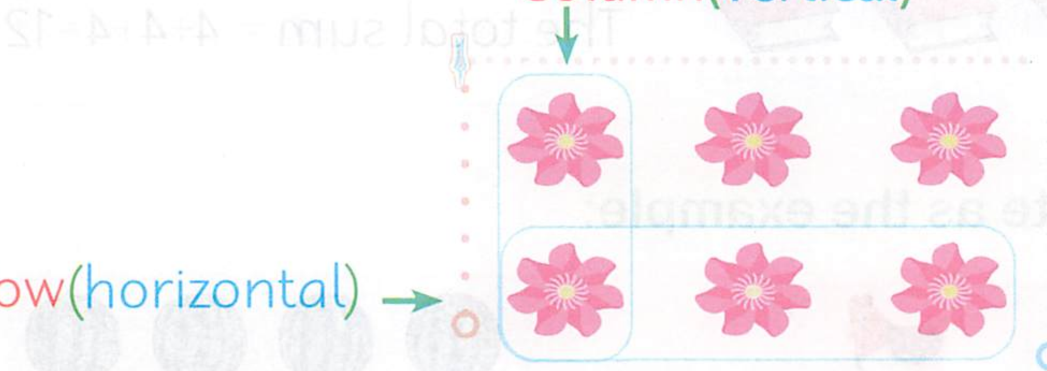
Arrays

Chapter (2)
Lessons
(15,16)



The array: is ordered objects in rows and columns.

Column(vertical)

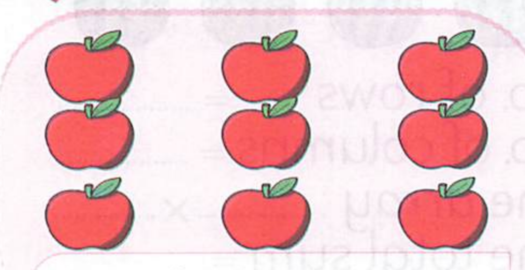




Row(horizontal)



1 Complete as the example:



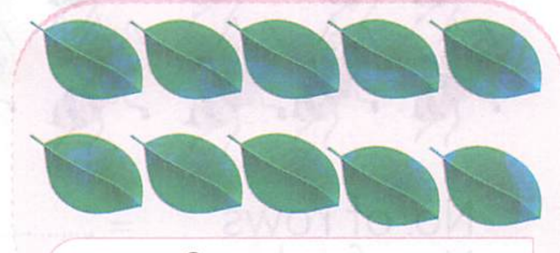
No. of rows = 3
No. of columns = 3
Th array : 3 × 3



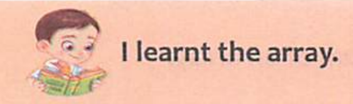
No. of rows = ...
No. of columns =..........
Th array: .... × ....



No. of rows = ...
No. of columns =..........
Th array: .... × ....

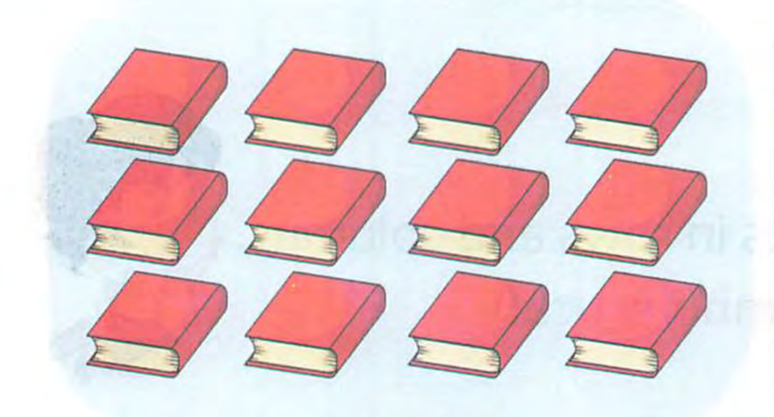


No. of rows = ...
No. of columns =..........
Th array: .... × ....



I learnt the array.

Finding the total sum of the array using rows



No. of rows = 3

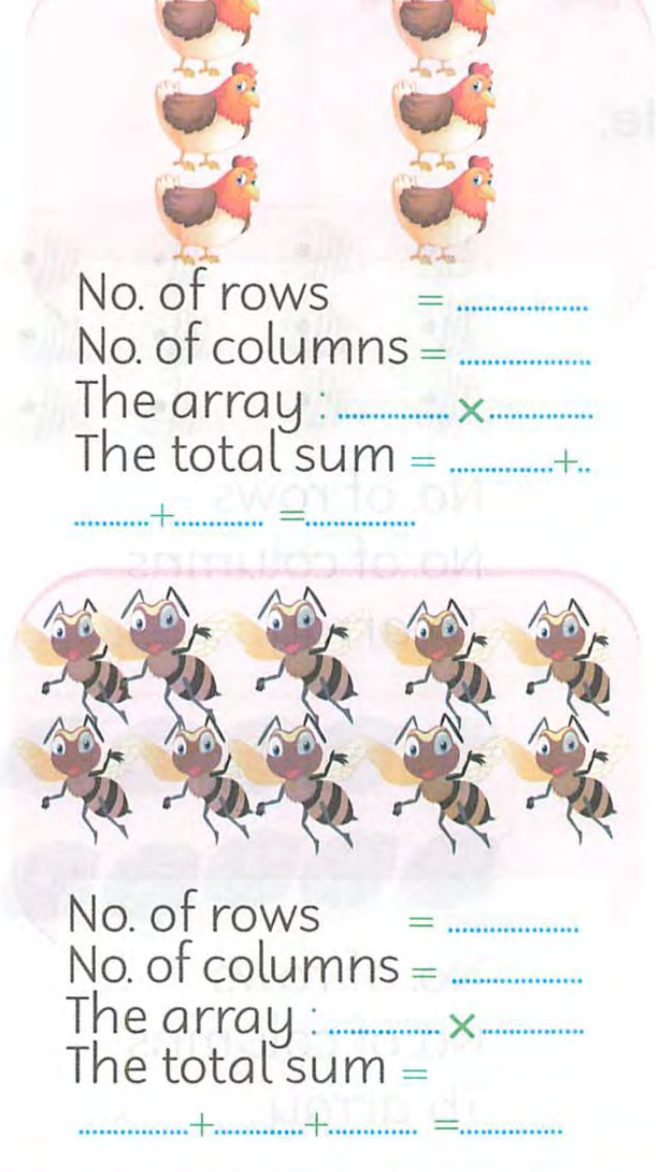
No. of columns = 4

The array : 3×4

The total sum = $4 + 4 + 4 = 12$



2 Complete as the example:



No. of rows = ...

No. of columns = ...

The array : .... × ....

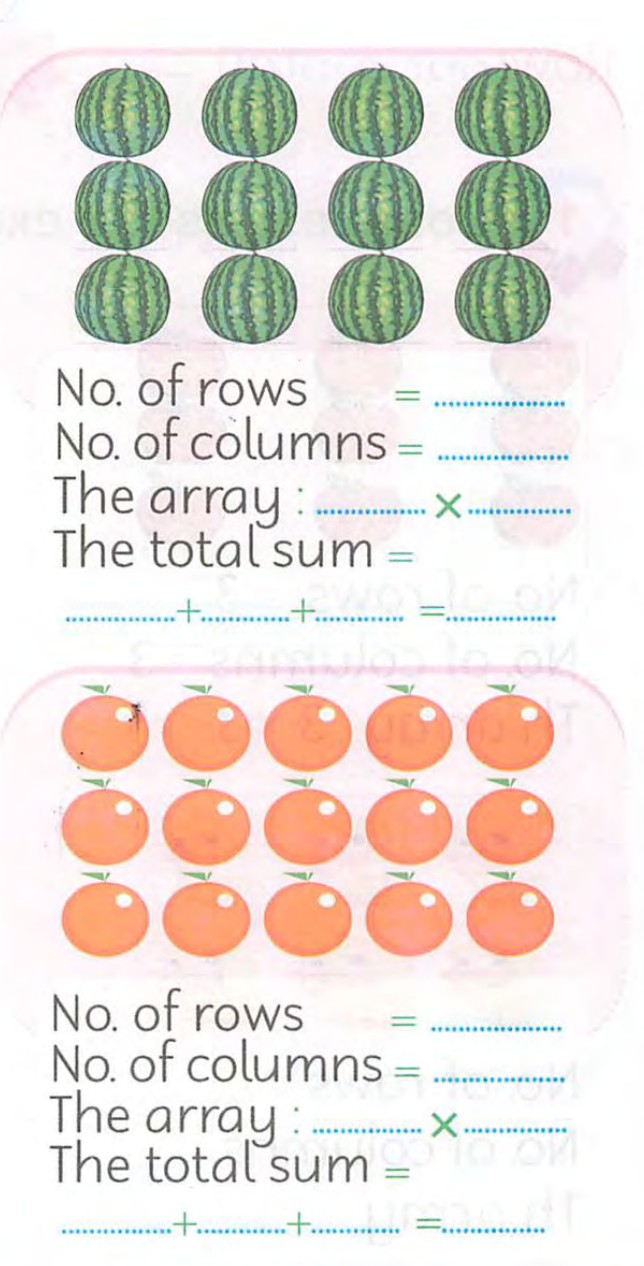
The total sum = ... + ... + ... = ...

No. of rows = ...

No. of columns = ...

The array : .... × ....

The total sum = ... + ... + ... = ...



No. of rows = ...

No. of columns = ...

The array : .... × ....

The total sum = ... + ... + ... = ...

No. of rows = ...

No. of columns = ...

The array : .... × ....

The total sum = ... + ... + ... = ...



Finding the total sum of the array using columns

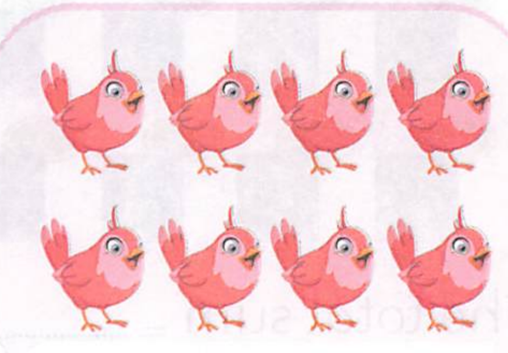
3 Complete as the example:



The total sum =

3 + 3 + 3

3 × 3 = 9



The total sum =

.... + ... + ... + ...

.... × .... = ...

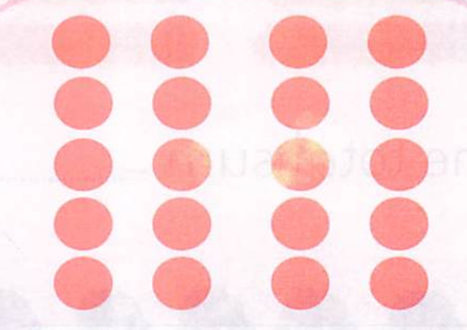




The total sum =

.... + ... + ... + ... + ... + ...

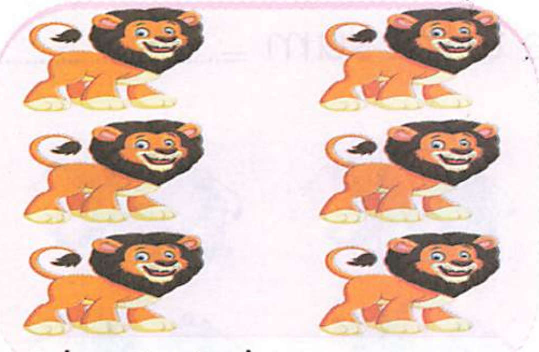
.... × .... = ...



The total sum =

.... + ... + ... + ...

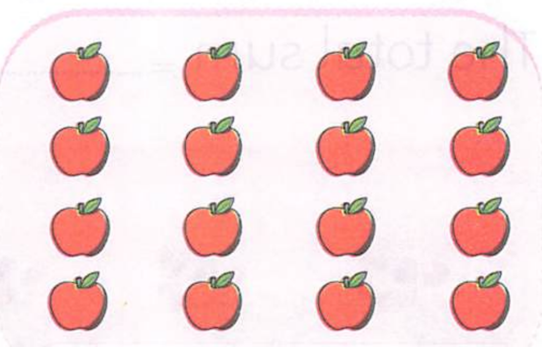
.... × .... = ...



The total sum =

.... + ...

.... × .... = ...



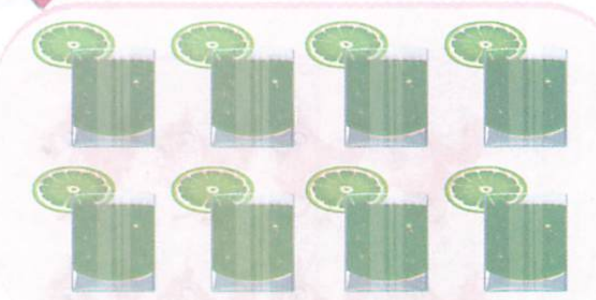
The total sum =

.... + ... + ... + ...

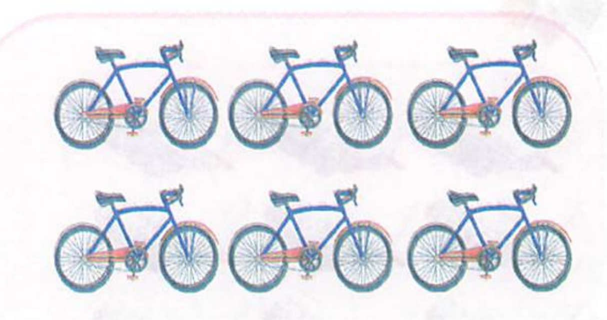
.... × .... = ...



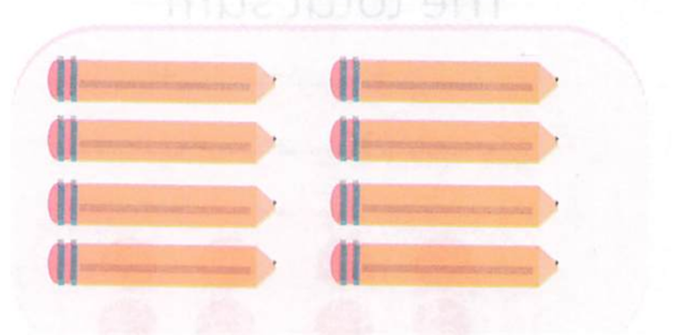
4 Complete:



The total sum = ...



The total sum = ...



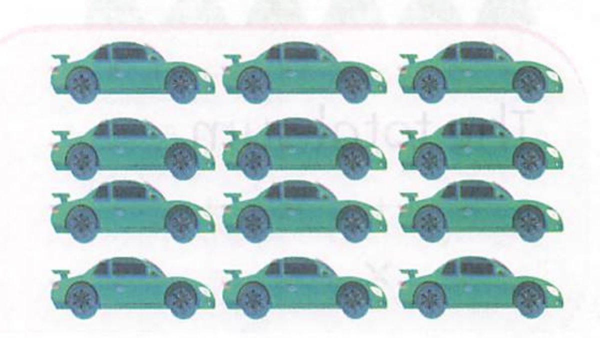
The total sum = ...



The total sum = ...



The total sum = ...



The total sum = ...



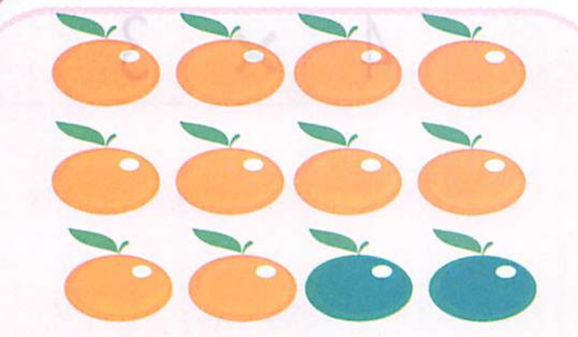
The total sum = ...



The total sum = ...



5 Complete the non-array to get an array as the example:



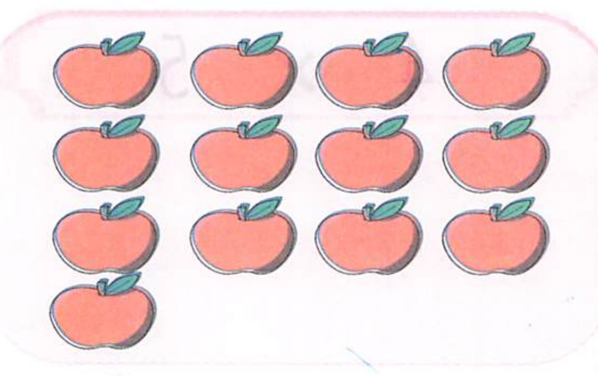
No. of rows = 3 rows
No. of columns = 4 columns
The total = $3 \times 4 = 12$



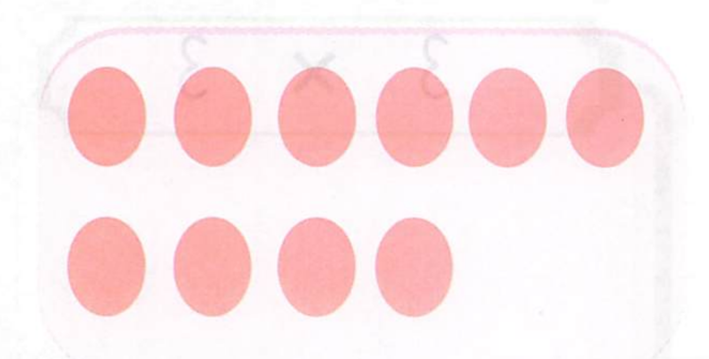
No. of rows = ...
No. of columns = ...
The total = ... × .... = ...



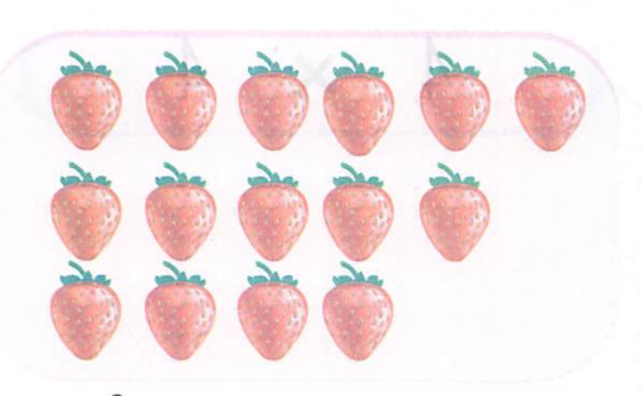
No. of rows = ...
No. of columns = ...
The total = ... × .... = ...



No. of rows = ...
No. of columns = ...
The Total = ... × .... = ...



No. of rows = ...
No. of columns = ...
The total = ... × .... = ...

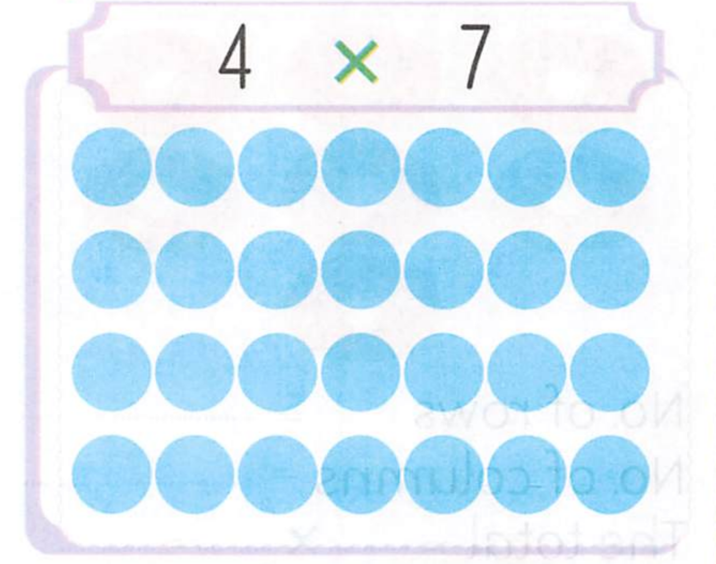


No. of rows = ...
No. of columns = ...
The total = ... × .... = ...



6 Draw arrays as required as the example:

4 × 7





4 × 3



4 × 5

3 × 6

4 × 4

3 × 3

I managed to draw arrays.

Multiplication

Chapter (2)
Lessons
(17,18)



Addition sentence 3 + 3 + 3 + 3 = 12

Multiplication sentence 4 × 3 = 12

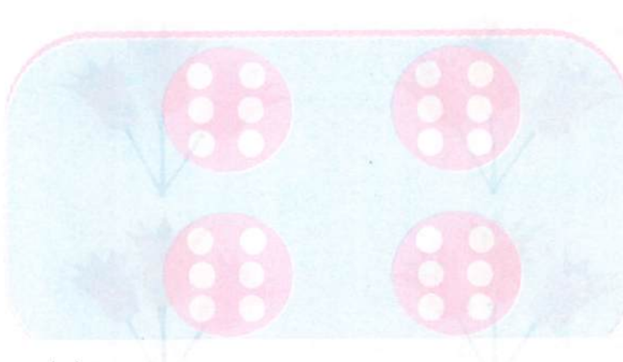


1 Complete as the example:

Addition sentence ...... + ... + ... + ...

Multiplication sentence

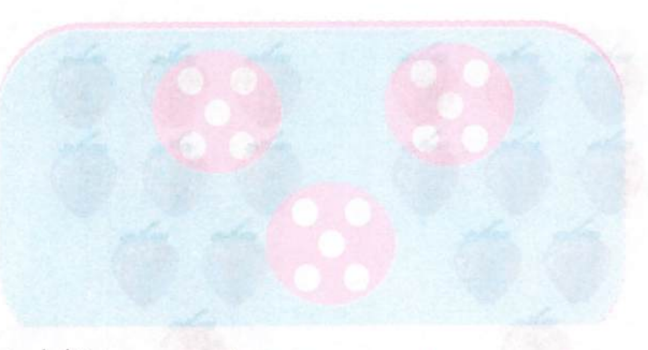
...... × ...... = ...



Addition sentence ...... + ... + ... + ...

Multiplication sentence

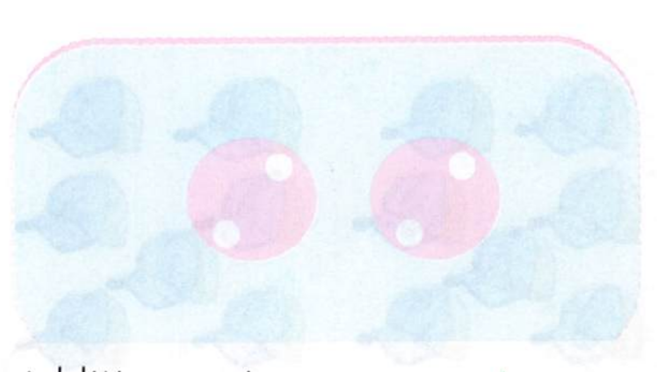
...... × ...... = ...



Addition sentence ...... + ... + ...

Multiplication sentence

...... × ...... = ...



Addition sentence ...... + ...

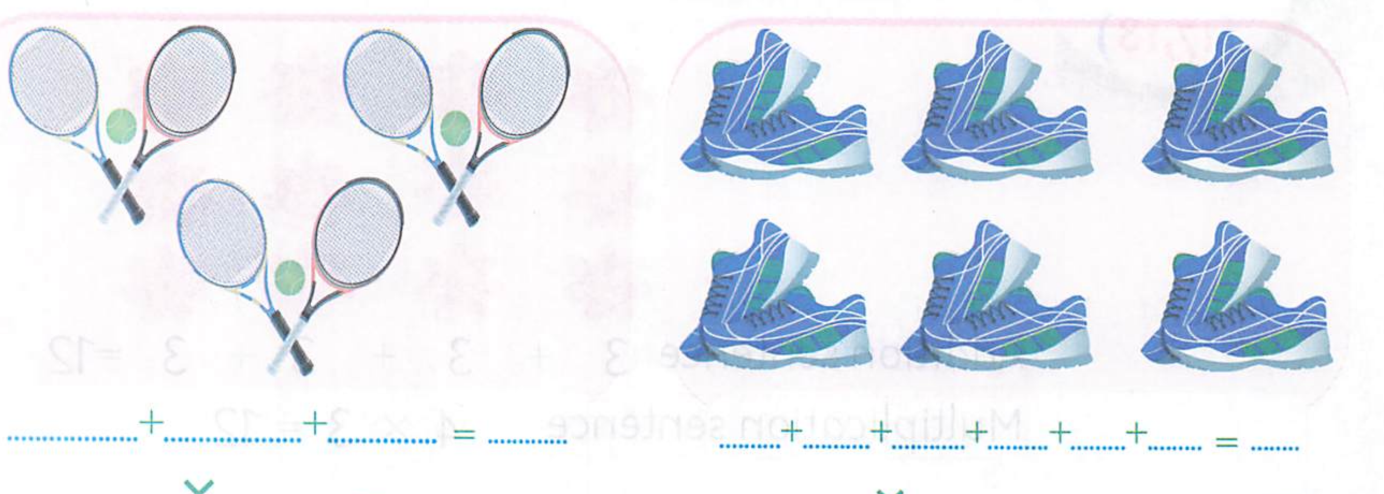
Multiplication sentence

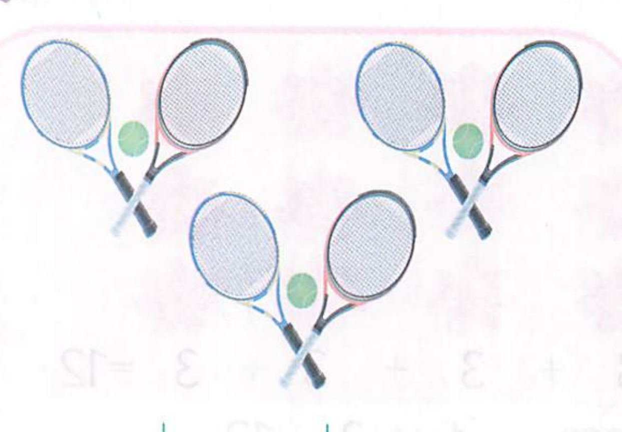
...... × ...... = ...

I learnt multiplication using groups.

Lessons 17,18

2 Complete:





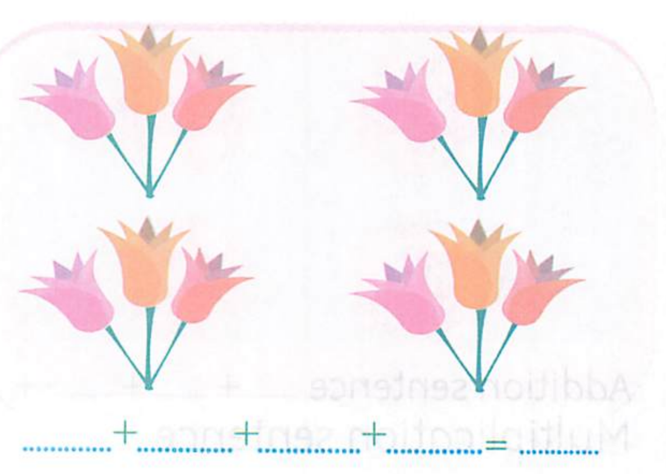
.... + ... + ... = ...

.... × .... = ...

.... + ... + ... + ... + ... + ... = ...

.... × .... = ...





.... + ... + ... + ... = ...

.... × .... = ...



.... + ... + ... = ...

.... × .... = ...

.... + ... = ...

.... × .... = ...

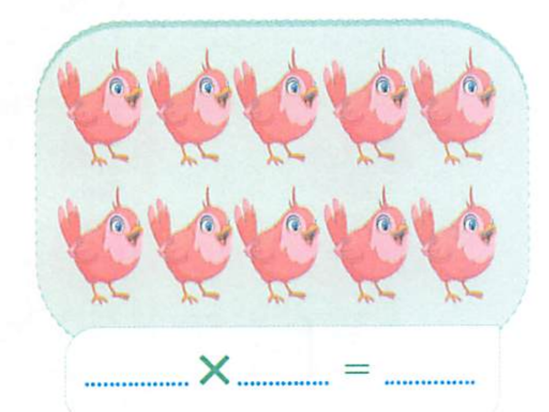
.... + ... = ...

.... × .... = ...

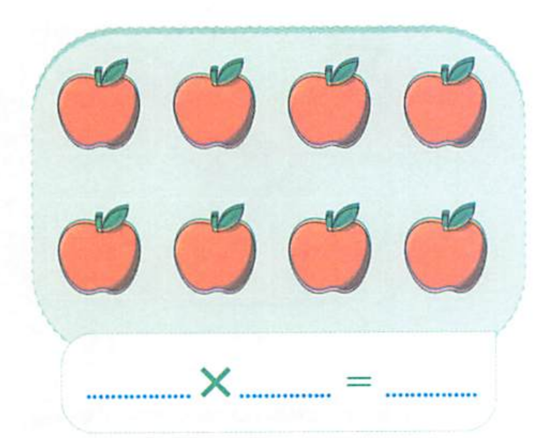




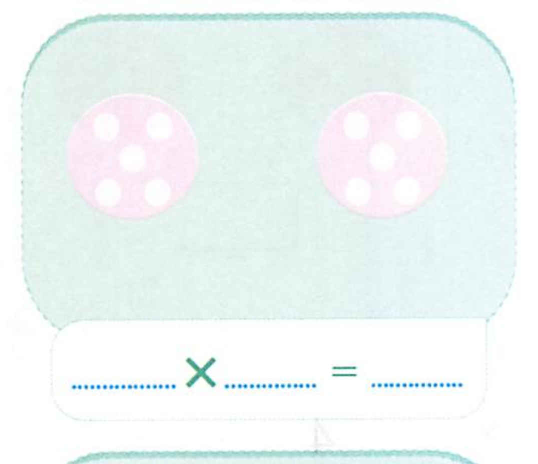
3 Write the multiplication sentence for the following:



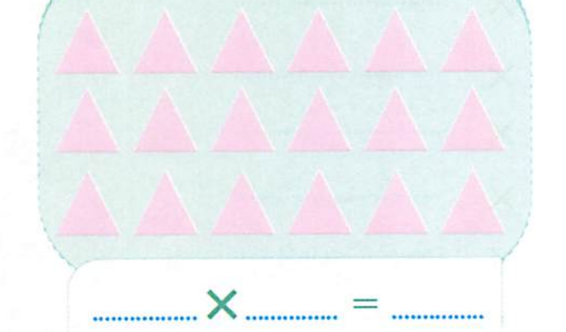
.... × .... = ...



.... × .... = ...



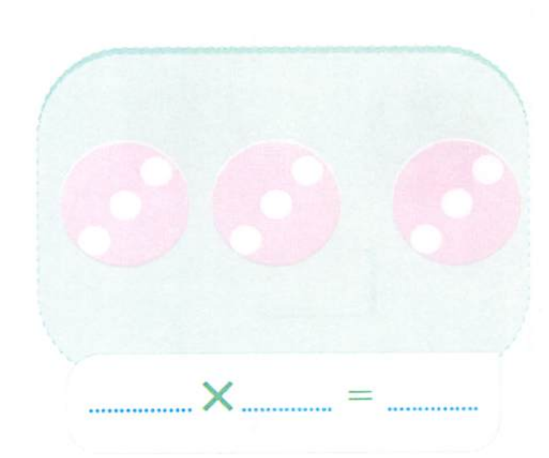
.... × .... = ...



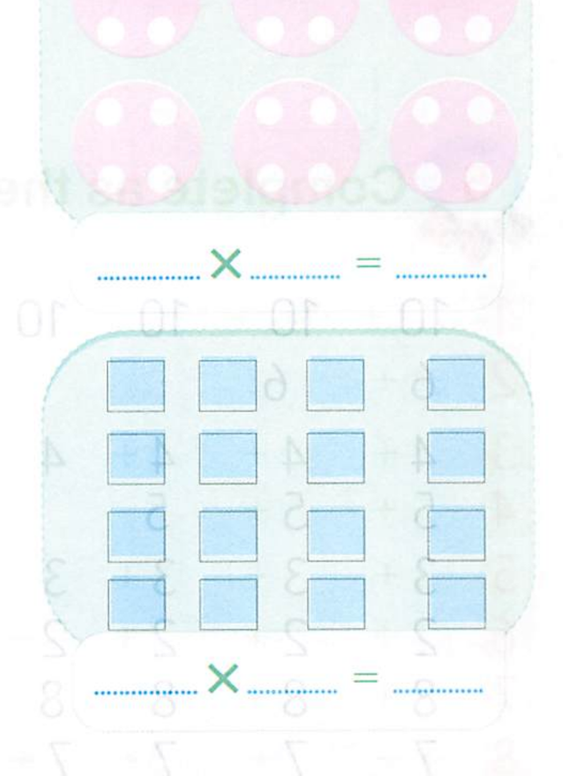
.... × .... = ...



.... × .... = ...



.... × .... = ...



.... × .... = ...

.... × .... = ...



4 Tick (✓)below the picture that represents the right multiplication product:

4 × 3

3 × 5

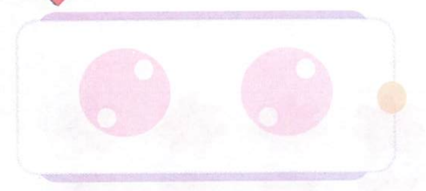
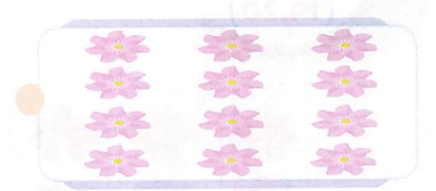
2 × 6

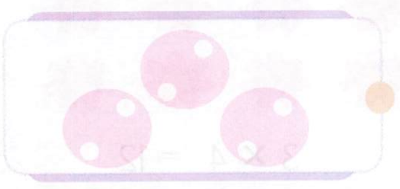
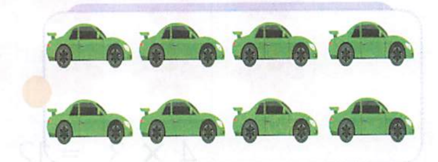


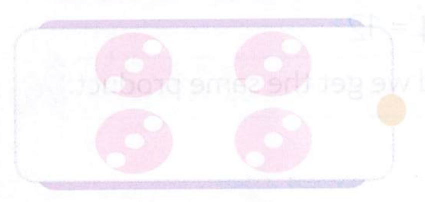
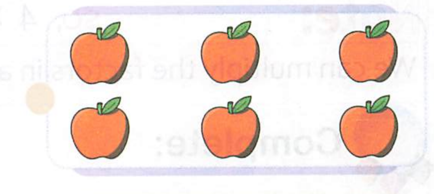
5 Complete as the example:

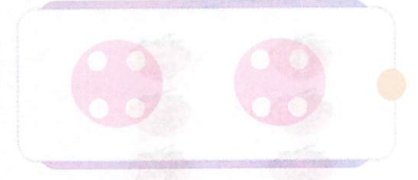
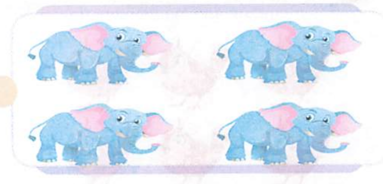
1	10 +	10 +	10 +	10	=	10	×	4
2	6 +	6			=	....	×	....
3	4 +	4 +	4 +	4	=	....	×	....
4	5 +	5 +	5		=	....	×	....
5	3 +	3 +	3 +	3	=	....	×	....
6	2 +	2 +	2 +	2 + 2	=	....	×	....
7	8 +	8 +	8 +	8	=	....	×	....
8	7 +	7 +	7 +	7 + 7	=	....	×	....

6 Match each set to the suitable array:

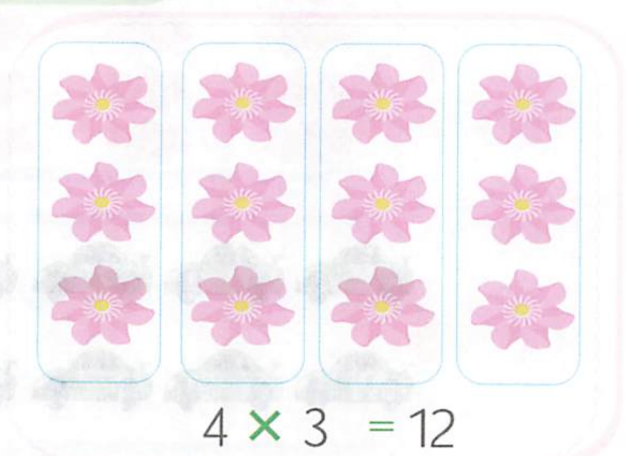
 

7 Complete as the example:

1. $3 \times 7 =$ 7 + 7 + 7 = 21
2. $4 \times 5 =$ ...... + ... + ... + ... = ...
3. $5 \times 2 =$ ...... + ... + ... + ... + ... = ...
4. $3 \times 9 =$ ...... + ... + ... = ...
5. $4 \times 4 =$ ...... + ... + ... + ... = ...
6. $3 \times 8 =$ ...... + ... + ... = ...

Commutative property of multiplication

Chapter (2)
Lessons
(19,20)



4 × 3 = 12

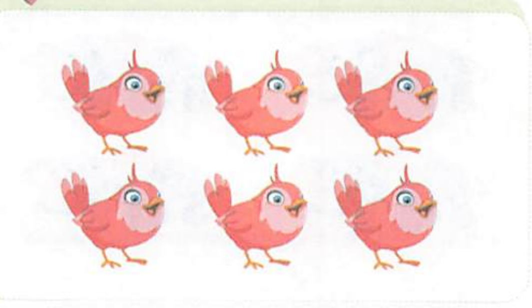
3 × 4 = 12

Note: so, 4 × 3 = 3 × 4 = 12

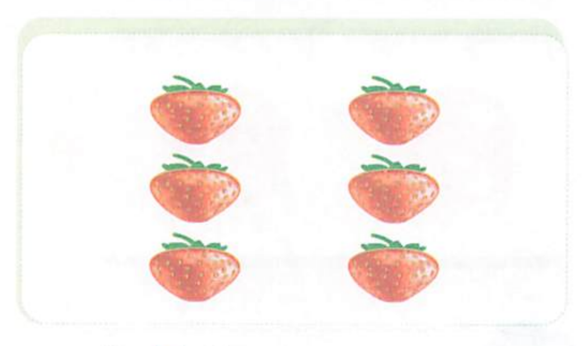
We can multiply the factors in any order and we get the same product.



1 Complete:

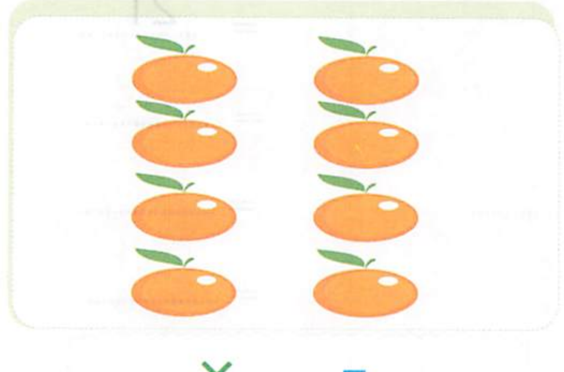


2 × 3 = ...

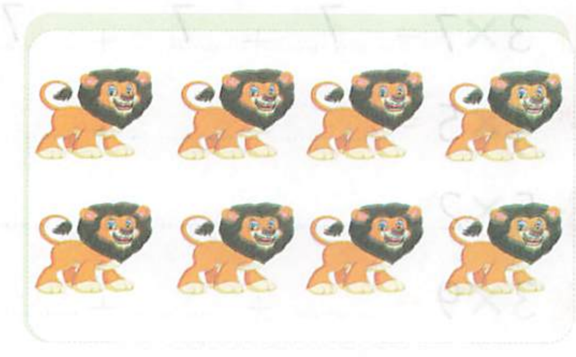


3 × 2 = ...

so, ... × .... = ... × ....



.... × .... = ...



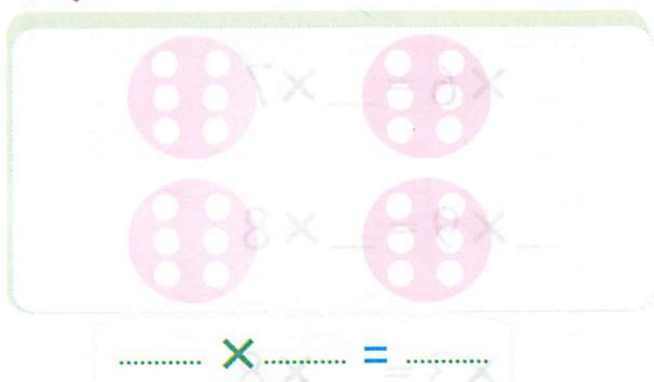
.... × .... = ...

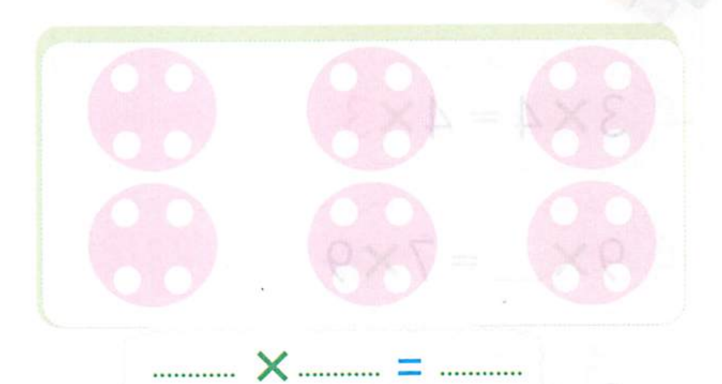
so, ... × .... = ... × ....

I learnt commutative property of multiplication.



2 Complete using commutative property:

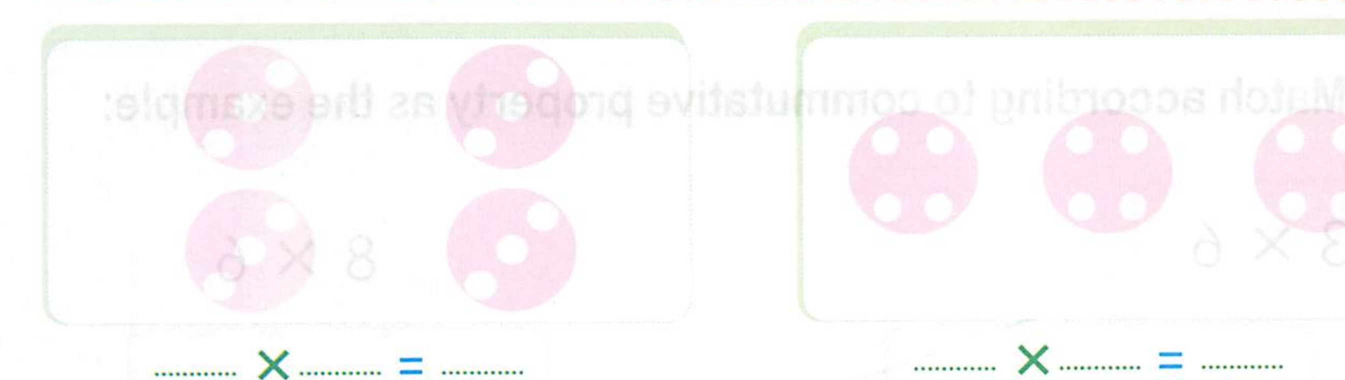


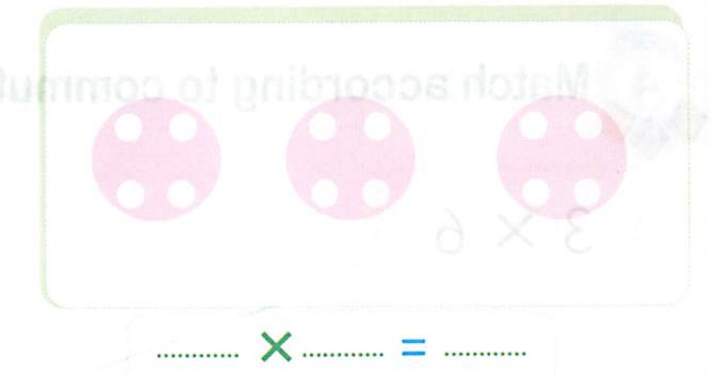


.... × .... = ...

.... × .... = ...

so, ... × .... = ... × ....

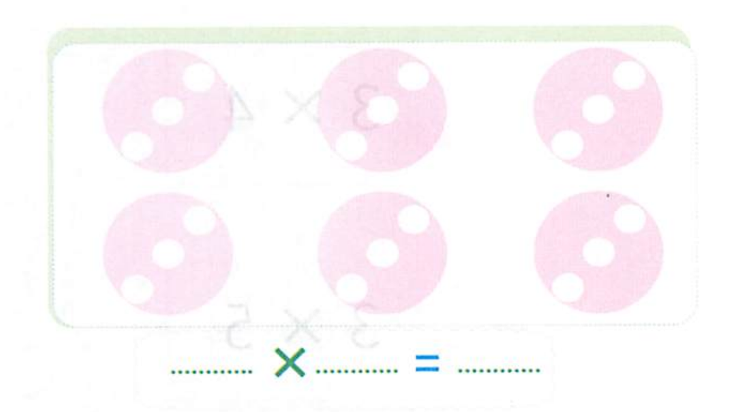


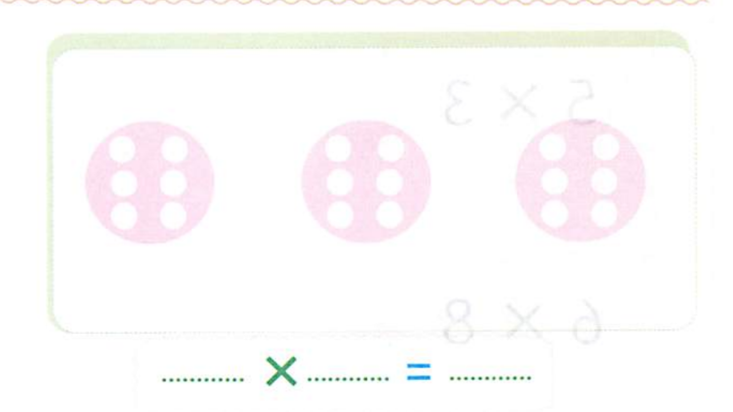


.... × .... = ...

.... × .... = ...

so, ... × .... = ... × ....





.... × .... = ...

.... × .... = ...

so, ... × .... = ... × ....



3 Complete as the example:

$3 \times 4 = 4 \times 3$

$9 \times$ ...... $= 7 \times 9$

$8 \times$ ...... $= 7 \times 8$

$4 \times 2 =$ ...... $\times 4$

...... $\times 6 =$ ...... $\times 7$

...... $\times 9 =$ ...... $\times 8$

...... $\times 3 =$ ...... $\times 8$

...... $\times 7 = 7 \times 5$

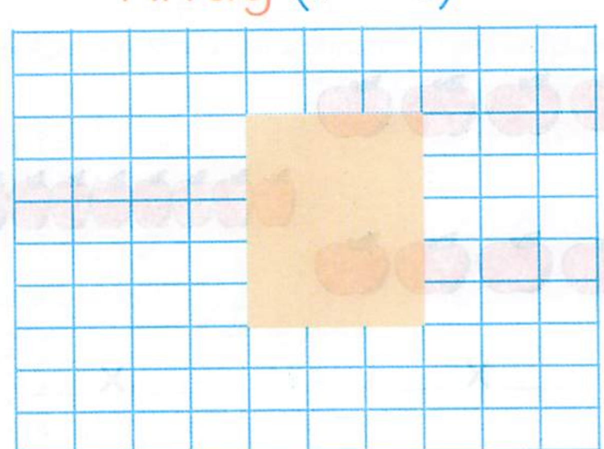
4 Match according to commutative property as the example:

3×6	8×6
7×4	6×3
5×3	3×4
6×8	3×5
4×3	4×7

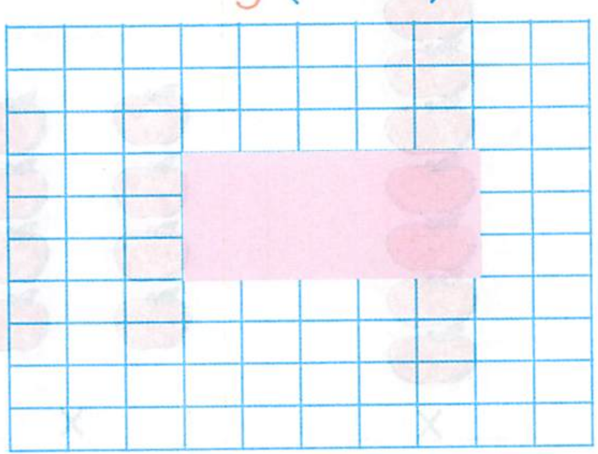


5 Create arrays representing commutative property, then color as the example:

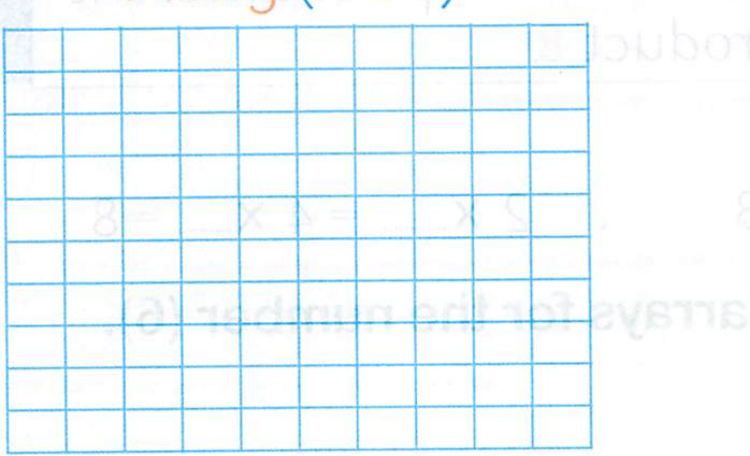
Array (5 × 3)



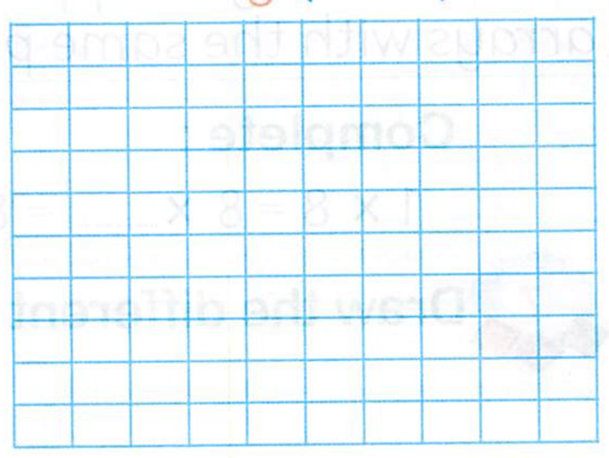
Array (3 × 5)



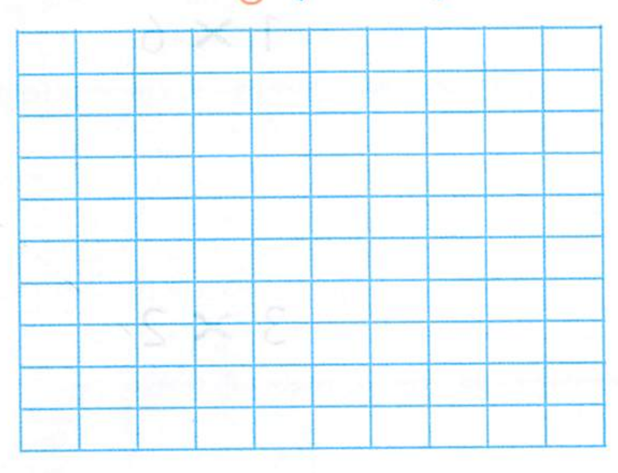
Array (4 × 7)



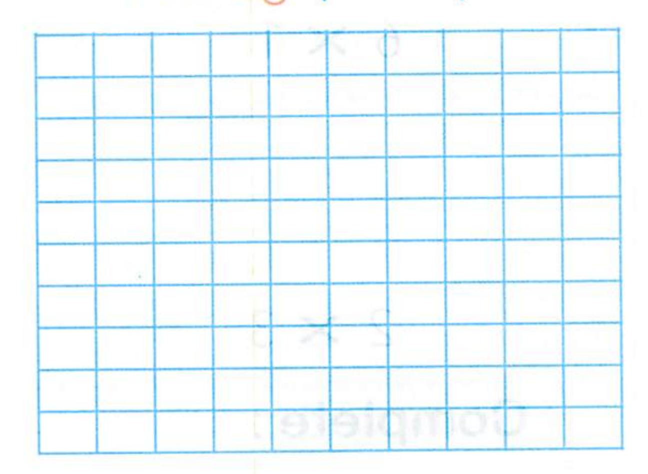
Array (7 × 4)



Array (5 × 6)



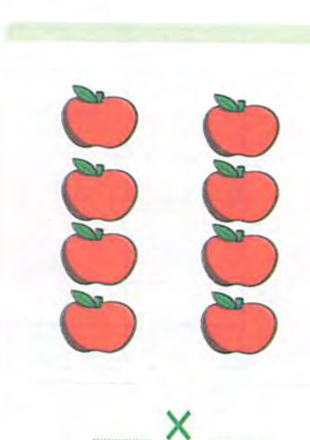
Array (6 × 5)

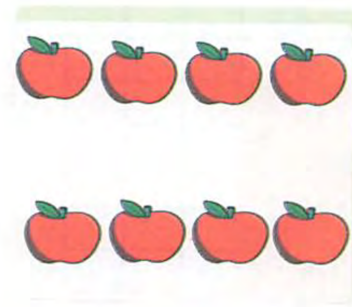




6 Write the name of each array:


..... × .....


..... × .....


..... × .....


..... × .....

Note:

We can arrange 8 apples on the shape of different arrays with the same product 8.

Complete :

1 × 8 = 8 × .... = 8 ، 2 × .... = 4 × .... = 8



7 Draw the different arrays for the number (6).

6 × 1

1 × 6

2 × 3

3 × 2

Complete :

1 × 6 = 6 × .... = 6 2 × .... = 3 × .... = 6



8 Draw the array on the grid using the two cards:

rows columns

Multiplication equation =

.... × .... = ...

rows columns

Multiplication equation =

.... × .... = ...

rows columns

Multiplication equation =

.... × .... = ...

rows columns

Multiplication equation =

.... × .... = ...

Review on chapter two



1 Write the place value for the digit in red:

Number	Place value	Number	Place value
3456		456325	
36784		21321	
934215		34532	



2 Write the value for the digit in red:

Number	Value	Number	Value
46353		45321	
32563		16507	
605632		325321	



3 Write the number in standard form:

1 3 thousands, 7 hundreds, 4 tens, 5 ones = ...

2 75 thousands, 9 hundreds, 1 tens, 8 ones = ...

3 175 thousands, 3 hundreds = ...

4 26 thousands, 8 tens, 7 ones = ...

5 23 thousands, 7 hundreds = ...



4 Write in expanded form:

3425 = ... + ... + ... + ...

72314 = ... + ... + ... + ... + ...

596324 = ... + ... + ... + ... + ... + ...

5 Write in standard form:

7000 + 800 + 70 + 4 = ...

90000 + 3000 + 700 + 40 + 9 = ...

800000 + 70000 + 6000 + 400 + 50 + 1 = ...

6 Compare using (> , < or =):

5613	☐	5715	75 thousands	☐	750 hundreds
54462	☐	111111	13400	☐	13 thousands and 4
534297	☐	534268	26573	☐	26579
808080	☐	808008	78315	☐	78315
23 thousands	☐	23001	99999 + 1	☐	1 hundred thousands

Review



7 Arrange the following numbers ascendingly:

3452 , 43123 , 83517 , 13512

The order is: .... , ... , ... , ...

425632 , 99475 , 9999 , 28235

The order is: .... , ... , ... , ...

345231 , 344131 , 88888 , 342231

The order is: .... , ... , ... , ...



8 Complete:



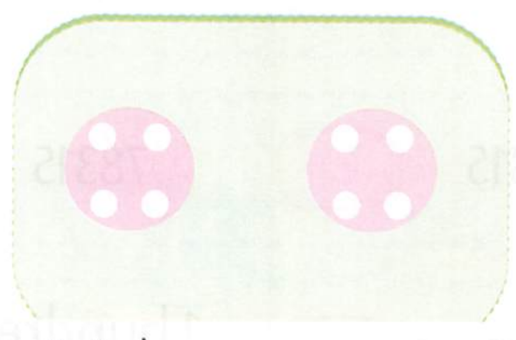
The total sum = ... + ...

= .... × .... = ...



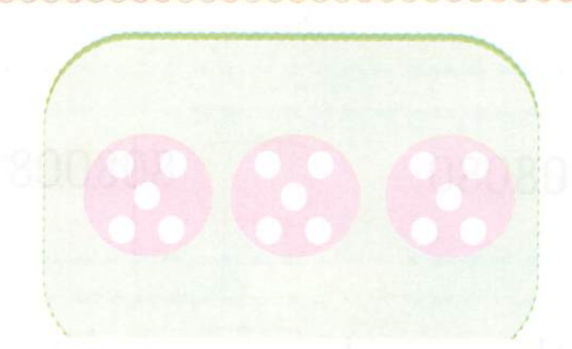
The total sum = ... + ... + ...

= .... × .... = ...



The total sum = ... + ...

= .... × .... = ...



The total sum = ... + ... + ...

= .... × .... = ...

Chapter Three



Chapter Three Outcomes

Lessons (21 , 22)

- Use a variety of strategies to solve multiplication story problems.
- Explain elements of multiplication story problems.
- Write a multiplication story problem that matches a given equation.
- Skip count by 4s.
- Match multiplication equation to story problems.

Lessons (23 , 24)

- Explain the rules of multiplying by 0 and 1.
- Identify common multiples of numbers 2 and 3.
- Predict common multiples of 2 and 3 greater than 120.
- Use evidence to justify and explain mathematical thinking.
- Identify numerical patterns when multiplying by 5 and 10.
- Identify the multiples of 5 and 10.
- Explain the relation between skip counting and multiplication facts.

Lesson (25)

- Explore the relationship between multiples of 2, 3, and 6.
- Model the commutative property of multiplication using arrays.
- Identify factor pairs using arrays.

Lessons (26 , 27)

- Skip count by 5s.
- Explain the relationship between skip counting by 5s and telling time to 5-minute increments.
- Read and write time in 5-minute increments on an analog clock.
- Use a variety of strategies to tell time to 5-minute increments.
- Analyze and correct incorrect time.

Lessons (28 , 29)

- Use manipulatives to model division.
- Explain the relationship between sharing equally and dividing.
- Use a variety of strategies to solve division problems.
- Explain their thinking when solving division problems.
- Discuss the importance of perseverance.

Lesson (30)

- Describe the relationship between factors and their product.
- Use the division symbol.
- Apply the relationship between multiplication and division to identify fact families.
- Solve division problems with one unknown value .

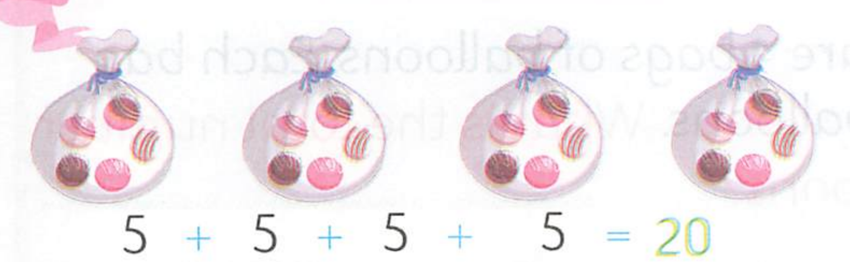
Multiplication story problems

Chapter (3)
Lessons
(21 , 22)

Farah bought 4 bags of sweets. Each bag contains 5 pieces of sweets .
How many pieces of sweets did Farah buy?

1st strategy

The repeated addition



5 + 5 + 5 + 5 = 20

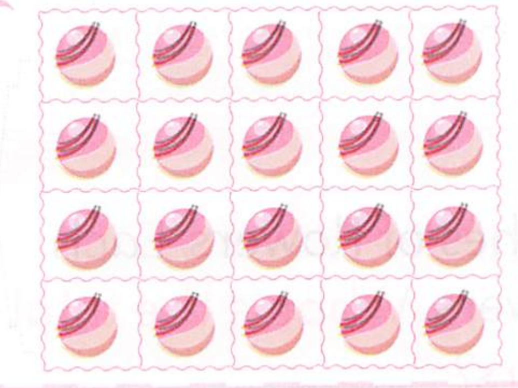
No .of sweet pieces = 4 × 5 = 20 pieces

2nd strategy

Arrays

5

4



No .of sweet pieces = 4 × 5 = 20 pieces

3rd strategy

Skip counting

+ 5 + 5 + 5

5 10 15 20

No .of sweet pieces = 20 pieces

I learnt to solve multiplication story problems using different strategies.

Lessons 21 , 22



1 Find the result using one of the previous strategies:

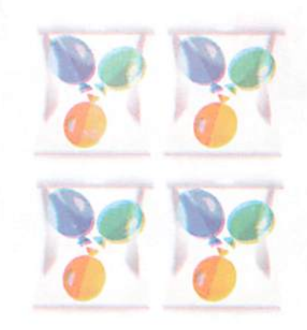
There are 8 bags of oranges. Each bag has 4 oranges. What is the total number of oranges? ....

....



There are 4 bags of balloons. Each bag has 3 balloons. What is the total number of balloons? ....

....



There are 3 crayon boxes. Each box has 8 crayons. What is the total number of crayons? ....

....



There are 3 bunches of flowers. Each bunch has 6 flowers. What is the total number of flowers? ....

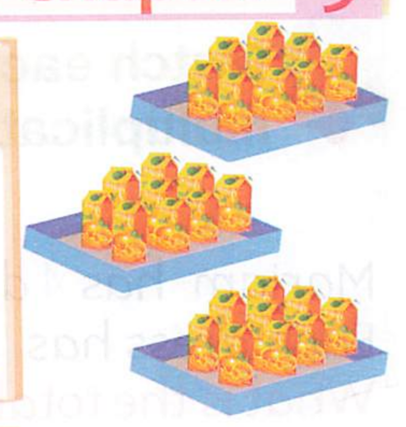
....



Hasan runs 4 kilometers every day. How many kilometers does Hasan run in 5 days? ....

....





There are 3 boxes of juice. Each box has 9 cartons. What is the total number of juice cartons? ....

....



There are 4 wheels in each car. How many wheels are there in 8 cars?

....

....



We have 8 cars. Each car has 5 seats. How many seats are there in all?

....

....



There are 6 bags of cookies. Each bag has 3 pieces. How many pieces of cookies are there in all? ....

....



Ahmed bought 4 bags of bread. Each bag has 5 loaves. What is the total number of the loaves? ....

....




2 Match each story problem to the suitable multiplication equation:



Mariam has 4 dresses. Each dress has 5 buttons. What is the total number of buttons?



There are 6 boxes. Each box has 7 cartons of juice. How many cartons of juice are there?



How many days are there in 4 weeks?



The butterfly has 6 legs. How many legs do 9 butterflies have?

There are 5 boxes of crayons. Each box has 6 crayons. How many crayons are there?

- $6 \times 9 = 54$
- $4 \times 7 = 28$
- $4 \times 5 = 20$
- $5 \times 6 = 30$
- $6 \times 7 = 42$

I learnt how to match story problems to the suitable multiplication equations.





3 Find the product, write a suitable story problem:

Multiplication equation $2 \times 6 =$ ....

....

....

....

....

Multiplication equation $5 \times 8 =$ ....

....

....

....

....

Multiplication equation $9 \times 2 =$ ....

....

....

....

....

Multiplication equation $5 \times 7 =$ ....

....

....

....

....

I learnt how to create story problems.

Multiples

Chapter (3)
Lessons
(23 , 24)

Multiplying by 0 and 1

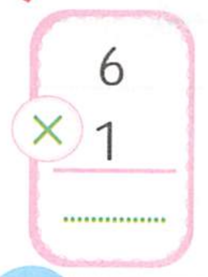
Multiplying by 0:
When you multiply a number by zero, the product is zero .

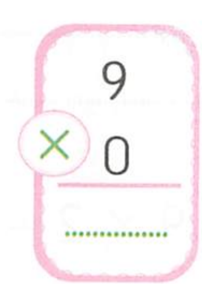
6 × 0 = 0
9 × 0 = 0

Multiplying by 1:
When you multiply a number by 1, the product is the same number.

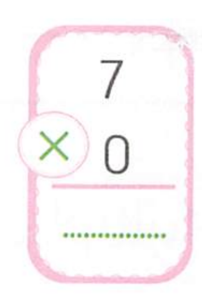
6 × 1 = 6
9 × 1 = 9

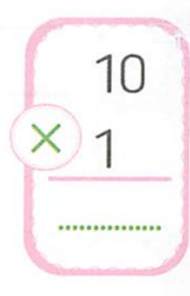
1 Complete:



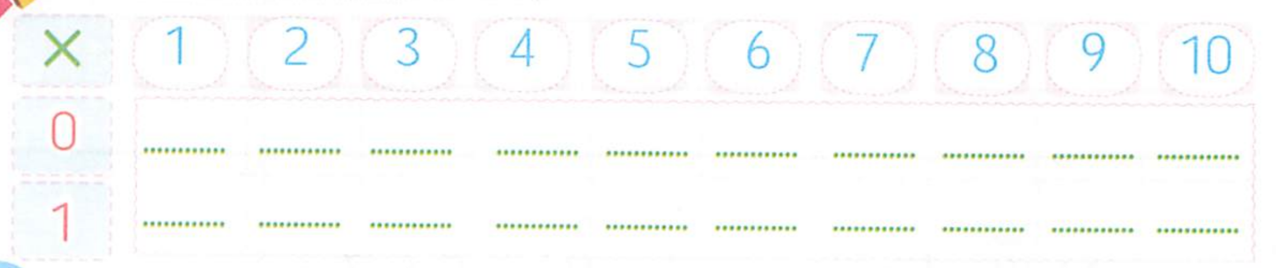








2 Complete the table:



×	1	2	3	4	5	6	7	8	9	10
0	....	....	....	....	....	....	....	....	....	....
1	....	....	....	....	....	....	....	....	....	....

3 Complete the missing number:

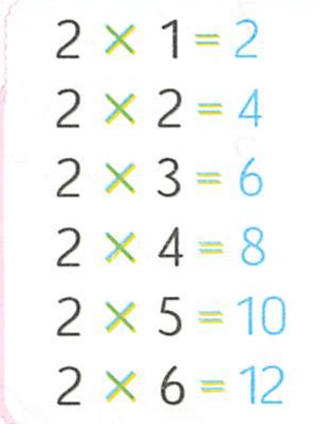
.... × 1 = 5	9 × .... = 9	0 × 21 = ...
1 × 9 = ...	15 × .... = 15	1 × 45 = ...
254 × 0 = ...	8 × 0 = ...	8 × 1 = ...

I learnt multiplication by 0 and 1.



Multiples of (2)





2 × 1 = 2	2 × 7 = 14
2 × 2 = 4	2 × 8 = 16
2 × 3 = 6	2 × 9 = 18
2 × 4 = 8	2 × 10 = 20
2 × 5 = 10	2 × 11 = 22
2 × 6 = 12	2 × 12 = 24

1 Match the equal results:

3 × 2   5 × 2   7 × 2

10   12   6   18   14   8

9 × 2   4 × 2   2 × 6

2 Find the product:

6 × 2 = ...	7 × 2 = ...	2 × 3 = ...	5 × 2 = ...
4 × 2 = ...	2 × 8 = ...	10 × 2 = ...	9 × 2 = ...

3 Complete the table:





































×	1	2	3	4	5	6	7	8	9	10
2	....	....	....	....	....	....	....	....	....	....

I learnt the multiples of 2.



4 Complete the missing number:

2 × .... = 10	.... × 2 = 6	7 × .... = 14
.... × 4 = 8	9 × .... = 18	2 × .... = 16

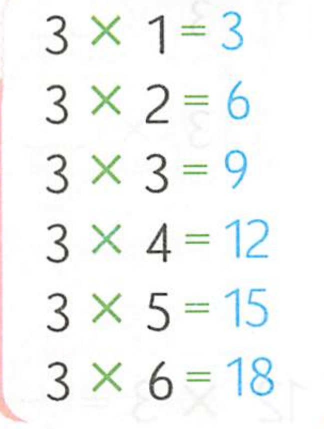
5 Find the product:

9 × 0 =	8 × 2 =	7 × 1 =
6 × 1 =	5 × 2 =	4 × 2 =
3 × 0 =	2 × 1 =	1 × 2 =
10 × 1 =	1 × 0 =	2 × 0 =
5 × 1 =	4 × 1 =	3 × 2 =
6 × 2 =	7 × 0 =	8 × 1 =
1 × 1 =	9 × 2 =	10 × 0 =
4 × 0 =	2 × 2 =	3 × 1 =
7 × 2 =	5 × 0 =	6 × 0 =
8 × 0 =	10 × 2 =	9 × 1 =



Multiples of (3)





$3 \times 1 = 3$
$3 \times 2 = 6$
$3 \times 3 = 9$
$3 \times 4 = 12$
$3 \times 5 = 15$
$3 \times 6 = 18$

$3 \times 7 = 21$
$3 \times 8 = 24$
$3 \times 9 = 27$
$3 \times 10 = 30$
$3 \times 11 = 33$
$3 \times 12 = 36$

1 Find the product:

$3 \times 1 =$	$4 \times 3 =$	$3 \times 9 =$	$3 \times 10 =$ ....
$7 \times 3 =$	$3 \times 6 =$	$3 \times 5 =$	$8 \times 3 =$ ....

2 Match the equal results:

3×2 3×5 3×7

27   24   21   18   6   15

3×8 3×9 3×6

3 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
3	....	....	....	....	....	....	....	....	....	....



I learnt the multiples of 3.



4 Complete the missing number:

3 × .... = 15	3 × .... = 27	3 × .... = 18	3 × .... = 24
3 × .... = 21	3 × .... = 12	3 × .... = 3	3 × .... = 0

5 Find the product:

9 × 3 = ...	7 × 3 = ...	12 × 3 = ...
6 × 2 = ...	4 × 0 = ...	5 × 3 = ...
3 × 3 = ...	1 × 2 = ...	2 × 2 = ...
10 × 2 = ...	11 × 3 = ...	9 × 0 = ...
5 × 2 = ...	3 × 2 = ...	7 × 1 = ...
6 × 1 = ...	8 × 2 = ...	4 × 2 = ...
1 × 1 = ...	10 × 3 = ...	1 × 3 = ...
4 × 3 = ...	3 × 0 = ...	2 × 0 = ...
7 × 2 = ...	6 × 3 = ...	5 × 1 = ...
8 × 1 = ...	9 × 2 = ...	8 × 3 = ...

Common Multiples of (2, 3)

1	(2)	3	(4)	5	(6)	7	(8)	9	(10)
11	(12)	13	(14)	15	(16)	17	(18)	19	(20)
21	(22)	23	(24)	25	(26)	27	(28)	29	(30)
31	(32)	33	(34)	35	(36)	37	(38)	39	(40)
41	(42)	43	(44)	45	(46)	47	(48)	49	(50)
51	(52)	53	(54)	55	(56)	57	(58)	59	(60)
61	(62)	63	(64)	65	(66)	67	(68)	69	(70)
71	(72)	73	(74)	75	(76)	77	(78)	79	(80)
81	(82)	83	(84)	85	(86)	87	(88)	89	(90)
91	(92)	93	(94)	95	(96)	97	(98)	99	(100)
101	(102)	103	(104)	105	(106)	107	(108)	109	(110)
111	(112)	113	(114)	115	(116)	117	(118)	119	(120)

Notice

All multiples of 2 are called even numbers

1 Using 120 chart, answer:

Write 10 multiples of (2)

2 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Write 10 multiples of (3)

3 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Write 5 common multiples of (2 and 3)

.... , ... , ... , ... , ...

2 Write 5 multiples of 2 greater than 44:



.... , ... , ... , ... , ...

3 Write 5 multiples of 3 greater than 60:



.... , ... , ... , ... , ...

I learnt the common multiples of 2, 3.

Multiples of (4)




4 × 1 = 4	4 × 7 = 28
4 × 2 = 8	4 × 8 = 32
4 × 3 = 12	4 × 9 = 36
4 × 4 = 16	4 × 10 = 40
4 × 5 = 20	4 × 11 = 44
4 × 6 = 24	4 × 12 = 48



1 Find the product:

4 × 1 = ...	4 × 4 = ...	4 × 9 = ...
7 × 4 = ...	4 × 6 = ...	4 × 5 = ...
4 × 10 = ...	8 × 4 = ...	2 × 4 = ...



2 Match the equal results:

4 × 2   4 × 5   4 × 7

36   24   28   8   32   20

4 × 8   4 × 9   4 × 6

I learnt multiples of 4.



3 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
4	....	....	....	....	....	....	....	....	....	....

4 Complete the missing number:

4 × .... = 20 | 4 × .... = 28 | 4 × .... = 24 | 4 × .... = 36



5 Find the product:

0 × 5 = ...
5 × 4 = ...
4 × 9 = ...
4 × 7 = ...
2 × 2 = ...
4 × 8 = ...
2 × 6 = ...
4 × 4 = ...
3 × 6 = ...

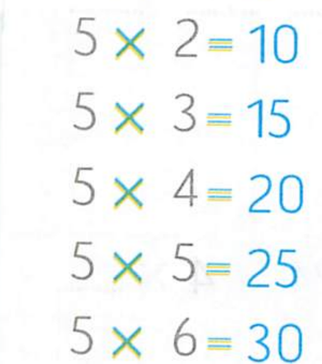
7 × 4 = ...
3 × 7 = ...
5 × 2 = ...
2 × 8 = ...
1 × 9 = ...
8 × 0 = ...
4 × 1 = ...
1 × 1 = ...
10 × 3 = ...

2 × 9 = ...
2 × 3 = ...
3 × 4 = ...
3 × 9 = ...
5 × 3 = ...
8 × 3 = ...
3 × 3 = ...
4 × 6 = ...
4 × 10 = ...



Multiples of (5)





5 × 1 = 5	5 × 7 = 35
5 × 2 = 10	5 × 8 = 40
5 × 3 = 15	5 × 9 = 45
5 × 4 = 20	5 × 10 = 50
5 × 5 = 25	5 × 11 = 55
5 × 6 = 30	5 × 12 = 60

1 Find the product:

5 × 5 = ...	5 × 9 = ...	8 × 5 = ...
7 × 5 = ...	6 × 5 = ...	12 × 5 = ...
11 × 5 = ...	3 × 5 = ...	5 × 4 = ...

2 Match the equal results:

4 × 5   5 × 7   5 × 12

55   45   60   40   35   20

8 × 5   5 × 11   5 × 9

I learnt multiples of 5.



3 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
5	....	....	....	....	....	....	....	....	....	....



4 Complete the missing number:

5 × .... = 15

5 × .... = 55

5 × .... = 5

5 × .... = 45

5 × .... = 60

5 × .... = 35

5 × .... = 30

5 × .... = 40

5 × .... = 20

5 Choose the correct answer:

1. 5 × .... = 35 (7 - 8 - 9)
2. 4 × 5 = ... (20 - 30 - 40)
3. 5 × .... = 0 (1 - 2 - 0)
4. 9 × .... = 45 (6 - 5 - 4)
5. 5 × .... = 40 (8 - 9 - 0)
6. 3 × .... = 21 (4 - 6 - 7)
7. 8 × .... = 24 (3 - 4 - 5)



Multiples of (6)



6 × 1 = 6	6 × 7 = 42
6 × 2 = 12	6 × 8 = 48
6 × 3 = 18	6 × 9 = 54
6 × 4 = 24	6 × 10 = 60
6 × 5 = 30	6 × 11 = 66
6 × 6 = 36	6 × 12 = 72



1 Find the product:

6 × 6 = ...	6 × 9 = ...	6 × 4 = ...
3 × 6 = ...	5 × 6 = ...	7 × 6 = ...
6 × 2 = ...	6 × 1 = ...	6 × 8 = ...



2 Match the equal results:

6 × 6   6 × 5   6 × 3

30   42   24   18   36   48

6 × 8   6 × 7   6 × 4

I learnt multiples of 6.



3 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
6	....	....	....	....	....	....	....	....	....	....

4 Compare using (>, < or =):

18 − 12 .... 6 × 1

6 × 6 .... 6 × 5

25 + 27 .... 7 × 6

9 × 4 .... 6 × 6

5 Choose the correct answer:

1. 6 × 11 = ... (66 - 24 - 18)
2. .... × 6 = 24 (3 - 4 - 5)
3. 5 × 9 = ... (18 - 45 - 54)
4. 5 × .... = 30 (7 - 6 - 8)
5. .... × 6 = 72 (12 - 11 - 10)
6. .... × 9 = 54 (5 - 6 - 7)
7. 3 × .... = 21 (5 - 6 - 7)
8. 5 × .... = 35 (5 - 6 - 7)



Multiples of (7)



7 × 1 = 7
7 × 2 = 14
7 × 3 = 21
7 × 4 = 28
7 × 5 = 35
7 × 6 = 42

7 × 7 = 49
7 × 8 = 56
7 × 9 = 63
7 × 10 = 70
7 × 11 = 77
7 × 12 = 84



1 Complete the missing number:

4 × 7 = ...	5 × .... = 35	.... × 7 = 21
2 × .... = 14	.... × 7 = 63	.... × 7 = 70
7 × .... = 49	7 × .... = 7	7 × .... = 42



2 Match the equal results:

7 × 7 | 7 × 8 | 7 × 9

49 | 56 | 35 | 63 | 70 | 7

7 × 5 | 7 × 10 | 7 × 1



I learnt multiples of 7.



3 Complete the table:



×	1	2	3	4	5	6	7	8	9	10
7	....	....	....	....	....	....	....	....	....	....



4 Answer the following:

A worker works 7 hours a day.
How many hours does he work in 5 days?

....

Kenzi has 6 bags of apples. Each bag has 7 apples.
What is the total number of the apples?

....

Karim bought 3 bars of chocolate for 9 pounds each.
How many pounds did Karim pay?

....

In P.E class, the students stood in 4 rows. Each row had 7 students.
How many students were there in the class?

....



Multiples of (8)



$8 \times 1 = 8$
$8 \times 2 = 16$
$8 \times 3 = 24$
$8 \times 4 = 32$
$8 \times 5 = 40$
$8 \times 6 = 48$

$8 \times 7 = 56$
$8 \times 8 = 64$
$8 \times 9 = 72$
$8 \times 10 = 80$
$8 \times 11 = 88$
$8 \times 12 = 96$



1 Find the product:

$3 \times 8 =$ ....
$7 \times 8 =$ ....
$8 \times 9 =$ ....

$6 \times 8 =$ ....
$10 \times 8 =$ ....
$8 \times 2 =$ ....

$5 \times 8 =$ ....
$8 \times 8 =$ ....
$8 \times 11 =$ ....



2 Match the equal results:

2×8 | 3×8 | 5×8

72 16 24 48 64 40

9×8 | 8×8 | 6×8

I learnt multiples of 8.



3 Choose the correct answer:

32

3 × 8   4 × 8   2 × 8

80

10 × 8   9 × 8   1 × 8

64

2 × 8   4 × 8   8 × 8

56

8 × 8   7 × 8   10 × 8



4 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
8	....	....	....	....	....	....	....	....	....	....



5 Answer the following:

Hani bought 7 pens for 8 pounds each.
How much did Hani pay for the seller?

....

There are 8 cars. Each car has 4 wheels.
What is the total number of the wheels?

....

There are 8 boxes. Each box has 10 cartons of juice.
What is the total number of juice cartons?

....



Multiples of (9)



9 × 1 = 9	9 × 7 = 63
9 × 2 = 18	9 × 8 = 72
9 × 3 = 27	9 × 9 = 81
9 × 4 = 36	9 × 10 = 90
9 × 5 = 45	9 × 11 = 99
9 × 6 = 54	9 × 12 = 108

1 Find the product:

3 × 9 = ... 2 × 9 = ... 9 × 9 = ...

7 × 9 = ... 9 × 5 = ... 9 × 4 = ...



2 Compare using (>, < or =):



9 × 4 .... 6 × 6 6 × 9 .... 8 × 5

7 × 8 .... 9 × 8 9 × 3 .... 7 + 20



3 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
9	....	....	....	....	....	....	....	....	....	....

I learnt multiples of 9.



4 Match the equal results:

3 × 9	7 × 9	4 × 9

72 63 27 45 36 54

5 × 9	8 × 9	6 × 9



5 Choose the correct answer:

9 × 4
(36 - 63 - 45)

9 × 9
(81 - 71 - 61)

9 × 3
(27 - 18 - 38)

8 × 9
(32 - 52 - 72)

9 × 6
(54 - 45 - 62)

9 × 5
(40 - 45 - 35)

9 × 7
(63 - 62 - 72)

9 × 10
(80 - 90 - 100)

Multiples of (10)





10 × 1 = 10	10 × 7 = 70
10 × 2 = 20	10 × 8 = 80
10 × 3 = 30	10 × 9 = 90
10 × 4 = 40	10 × 10 = 100
10 × 5 = 50	10 × 11 = 110
10 × 6 = 60	10 × 12 = 120

1 Find the product:

4 × 10 = ...   2 × 10 = ...   8 × 10 = ...

7 × 10 = ...   6 × 10 = ...   9 × 10 = ...

2 Complete the table:

×	1	2	3	4	5	6	7	8	9	10
10	....	....	....	....	....	....	....	....	....	....

3 Compare using (>, < or =):

3 × 10 .... 10 × 3   7 × 10 .... 6 × 9



5 × 10 .... 10 × 6   8 × 7 .... 8 × 10

I learnt multiples of 10.



4 Match the equal results:

10 × 5		10 × 7		10 × 8	
70	80	50	40	30	60
10 × 3		10 × 6		10 × 4	



5 Complete the missing number:

7 × .... = 0

6 × 10 = ...

3 × .... = 30

5 × .... = 0

7 × .... = 63

9 × .... = 81

9 × .... = 90

.... × 7 = 70

4 × .... = 40

10 × .... = 80



6 Find the product:

4 × 6 = ...	6 × 7 = ...	3 × 9 = ...	7 × 9 = ...	9 × 6 = ...
4 × 12 = ...	9 × 5 = ...	2 × 8 = ...	4 × 8 = ...	8 × 3 = ...
8 × 9 = ...	7 × 4 = ...	5 × 5 = ...	5 × 3 = ...	8 × 6 = ...
6 × 5 = ...	8 × 11 = ...	12 × 8 = ...	12 × 3 = ...	9 × 4 = ...
6 × 6 = ...	5 × 7 = ...	8 × 5 = ...	7 × 10 = ...	8 × 7 = ...
9 × 2 = ...	7 × 7 = ...	8 × 8 = ...	7 × 11 = ...	12 × 2 = ...

Factor Pairs

Chapter (3) Lesson (25)

We have 6 chairs. How many different arrays can we create?



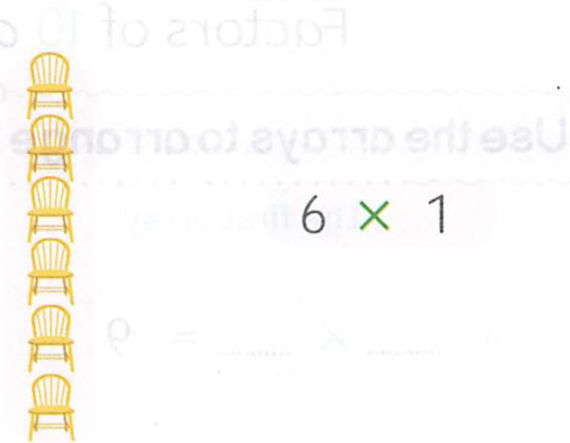
3 × 2



1 × 6



2 × 3



6 × 1

Notice

1 × 6 = 6 × 1 = 6

2 × 3 = 3 × 2 = 6

Factors of 6 are (1, 2, 3, 6)



1 Answer as the previous example:

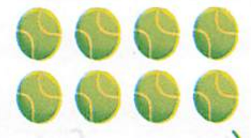
Use arrays to arrange 8 balls, then write the factors of 8.

1 × .... = 8   2 × .... = 8

The first array



The second array



Factors of 8 are (........ , ... , ... , ...)



Lesson 25

Use the arrays to arrange 10 marbles, then write factors of 10.

The first array

...... × ...... = 10

The second array

...... × ...... = 10

Factors of 10 are (...... , ... , ... , ...)

Use the arrays to arrange 9 balls, then write factors of 9.

The first array

...... × ...... = 9

The second array

...... × ...... = 9

Factors of 9 are (...... , ... , ...)

Use the arrays to arrange 4 stars, then write factors of 4.

The first array

...... × ...... = 4

The second array

...... × ...... = 4

Factors of 4 are (...... , ... , ...)



2 Write the factors as the example:



15

1 × 15 | 3 × 5

Factors of 15 are
(1, 3, 5, 15)

35



...... × ...... | ...... × ......

Factors of 35 are
(........ , ... , ... , ...)

14



...... × ...... | ...... × ......

Factors of 14 are
(........ , ... , ... , ...)

25



...... × ...... | ...... × ......

Factors of 25 are
(........ , ... , ...)

21

...... × ...... | ...... × ......

Factors of 21 are
(........ , ... , ... , ...)

22



...... × ...... | ...... × ......



Factors of 22 are
(........ , ... , ... , ...)



3 Complete, then write the factors of each number:

12 = 1 ×	12 = 2 ×	12 = 3 × ....

Factors of 12 are ....

18 = 1 ×	18 = 2 ×	18 = 3 × ....

Factors of 18 are ....

24 = 1 ×	24 = 2 ×	24 = 3 ×	24 = 4 × ....

Factors of 24 are ....

20 = 1 ×	20 = 2 ×	20 = 4 × ....

Factors of 20 are ....

4 Circle the correct answer:

- One of the factors of 12 (5 - 7 - 4)
- One of the factors of 28 (7 - 8 - 9)
- One of the factors of 63 (6 - 8 - 7)
- One of the factors of 45 (8 - 9 - 6)
- One of the factors of 72 (5 - 8 - 7)

Telling time

Chapter (3)
Lessons
(26 , 27)

The hours hand is
the short hand
It points to hours

The minutes hand is
the long hand
It points to minutes


a quarter of an hour
15 minutes


half an hour
30 minutes


3 quarters
45 minutes


an hour
60 minutes

1 Write the time on the digital clock as the example:

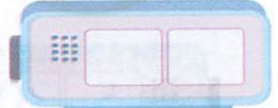










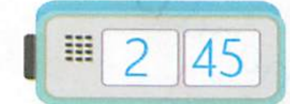



I learnt more about the time.



2 Draw the clock hands as the example:







6 15



10 30



3 15



7 45



8 00



4 45



11 00



2 15



5 30



1 45



9 15

Reading and writing the time to 5-minutes.

An hour = 60 minutes

5 minutes

10 minutes

15 minutes

20 minutes

25 minutes

30 minutes

35 minutes

40 minutes

45 minutes

50 minutes

55 minutes

Scale



When the long hand points to (1) it means that (5) minutes have passed. When it points to (2), so (10) minutes have passed

Example: The hour hand is between (1 and 2). The minutes hand points to (7). So, the time is after one o'clock.

No. of minutes = 7 × 5 = 35 minutes.

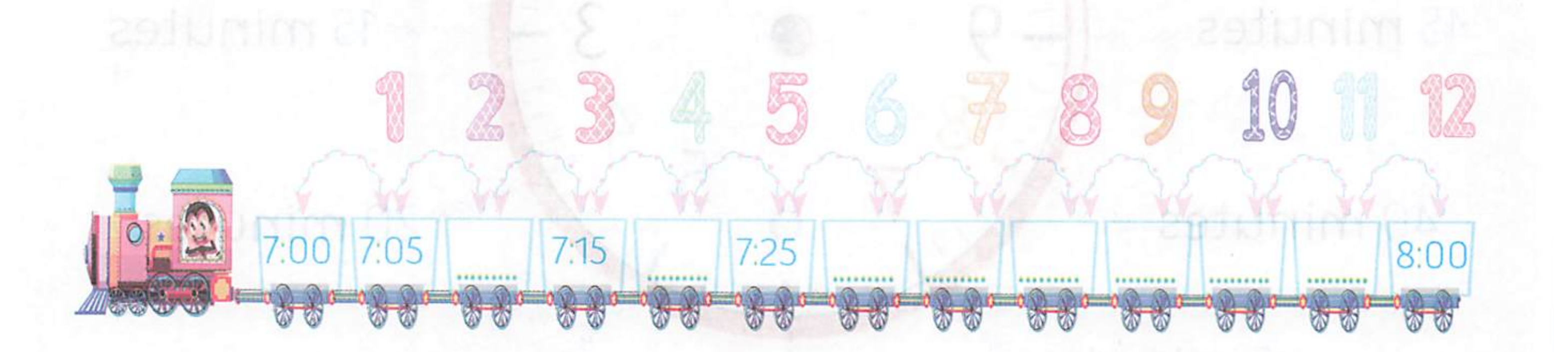
So, the time is 1:35 (one thirty five)

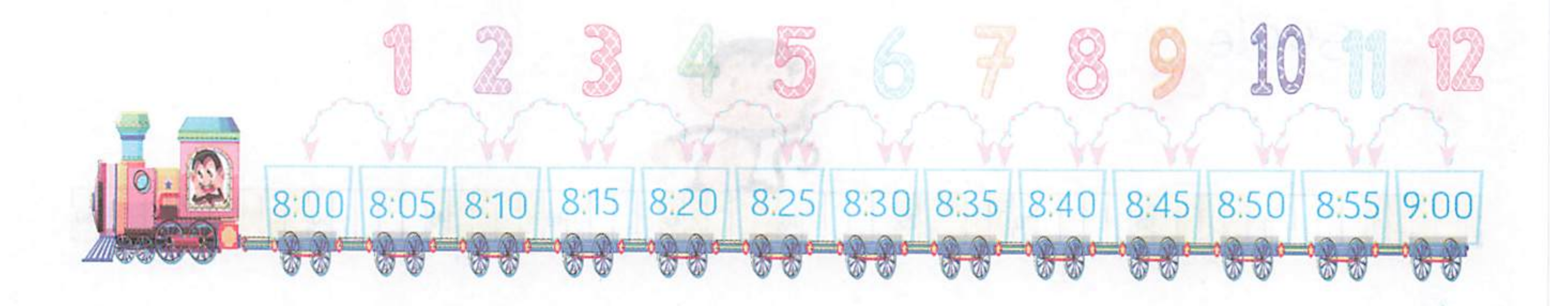


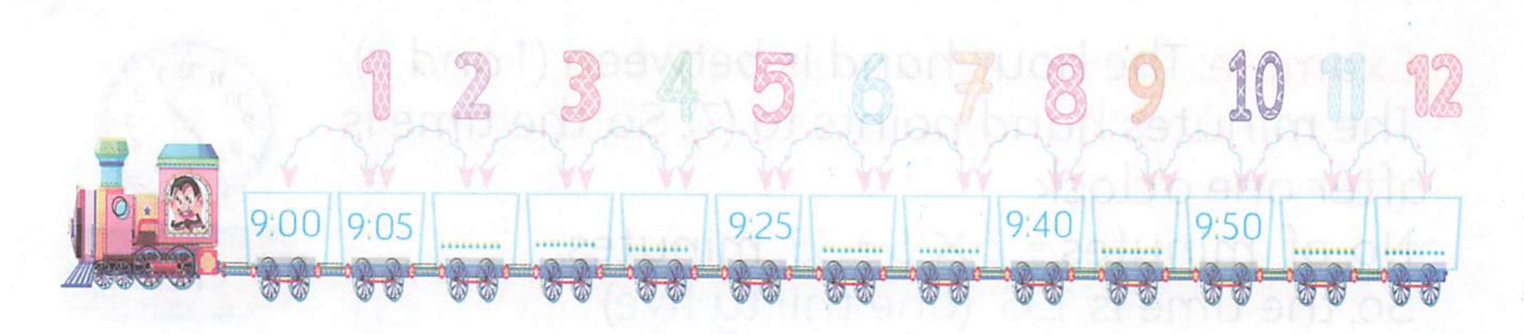


1 Complete as the example to represent an hour:









I learnt to read time to 5 minutes.



2 Draw the clock hands to show the time:



























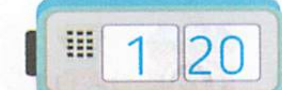


3 Write the time on the digital clock:



Draw the minutes hand according to the time:





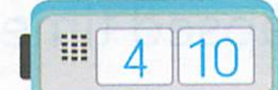


2 35



7 25







10 15



3 30



6 45



5 40



12 15



4 05



8 10



9 45

Elapsed Time

Amr started running at 3:00

He finished running at 3:30





5	10	15	20	25	30	
3:00	3:05	3:10	3:15	3:20	3:25	3:30



Elapsed time = 30 minutes



5 Complete as the example:

Start	Finish	Elapsed time
4 : 00	4 : 25	25 minutes
1 : 10	1 : 50	.... minutes
12 : 05	12 : 30	.... minutes
		.... minutes
		.... minutes

Story problems involving time

1



Mum put the cakes in the oven at (7:00). When she took them out, the time was as shown in the picture. How long did the cakes take in the oven ? ....

....

2



Omar left school at (3:00). When he reached home, the time was as shown in the picture.
How long did Omar take to walk from school to home ? ....

....

3



Mahmoud likes running. He started running at (7:00). When he finished, the time was as shown in the picture.
How long did Mahmoud run?

....

....



1 **The following table shows the daily activities for the pilot, Sameh:**

Activities	Times	
	Start	Finish
Getting up and having food	6 : 30	7 : 30
Going to the airport	7 : 30	8 : 00
Plane take off	8 : 45	9 : 00
Period of the flight	9 : 00	12 : 00
Plane landing	12 : 00	12 : 30



1. How long does the plane take to take off?
   ....

2. Which takes longer time, plane take off or plane landing? ....

3. How long does the flight take? ....

2 **The two clocks below show when Mona started and finished tidying up her room:**

☞ **How long did Mona take?**

1. One hour
2. Half an hour
3. An hour and a half
4. Two hours and a half

Start



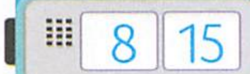
End





Tick (✓) below the typical time to the analog clock:







6 10



4 25



1 10



5 30



7 45



12 00



9 00



10 15



2 15



3 20



7 15

Division

Chapter (3)
Lessons
(28 , 29)



Division: it is the operation which makes equal groups



Example

Make 3 equal groups out of 12 flowers





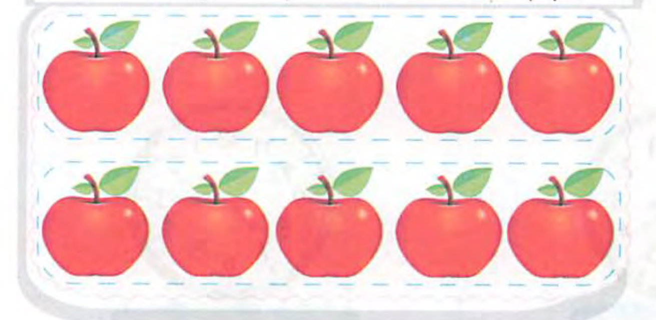


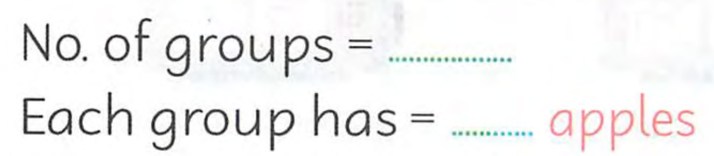
12 flowers were divided into 3 groups. So there were 4 flowers in each group.



1 Answer as required:

Make 2 groups out of 10 apples





No. of groups = ...

Each group has = ... apples

Make 3 groups out of 18 bottles

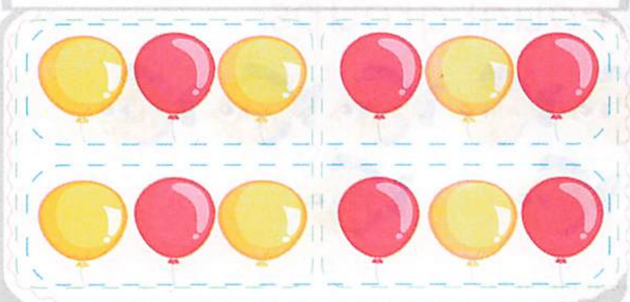


No. of groups = ...

Each group has = ... bottles

I learnt division.

Make 4 groups out of 12 balloons



No. of groups = ...

Each group has = ... balloons

Make 3 groups out of 6 cups

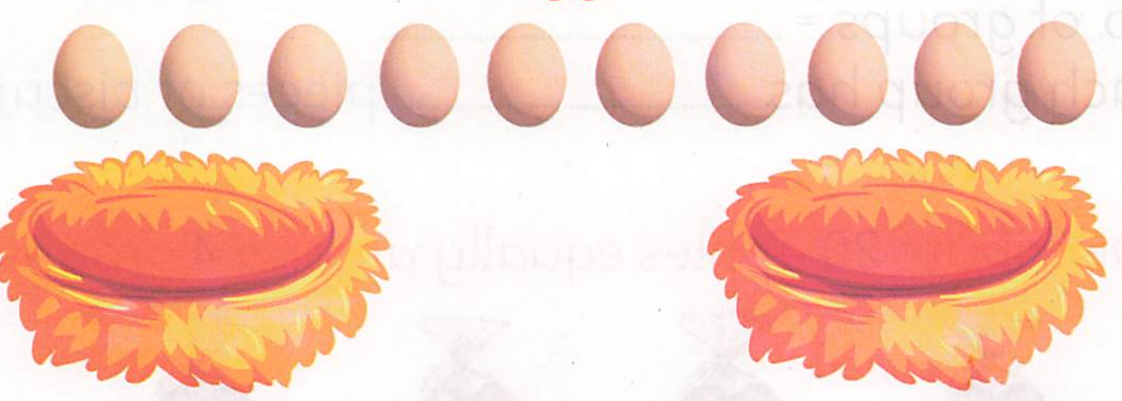


No. of groups = ...

Each group has = ... cups

2 Answer the following:

Distribute 10 eggs to two nests.



Each nest has .... eggs

Distribute 6 pieces of cake to two plates.



Each plate has .... pieces of cake

Lessons 28 , 29

Divide 15 fish into 3 equal groups.







No. of groups = ...

Each group has .... fish

Divide 25 pieces of biscuits into 5 equal groups.

No. of groups = ...

Each group has .... pieces of biscuits

Distribute 20 apples equally among 4 groups.






No. of groups = ...

Each group has .... apples

Distribute 9 marbles equally among 3 groups.





No. of groups = ...

Each group has .... marbles

Story problems involving division

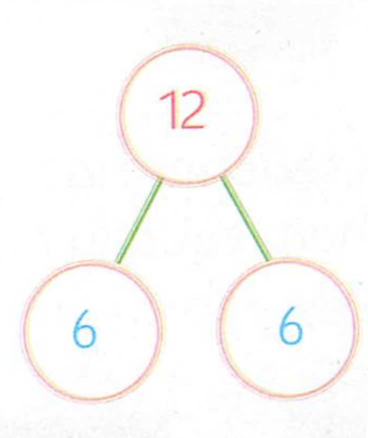
Salma bought 12 flowers. She wanted to share them equally with her friend, Hana.

How many flowers did each one have?







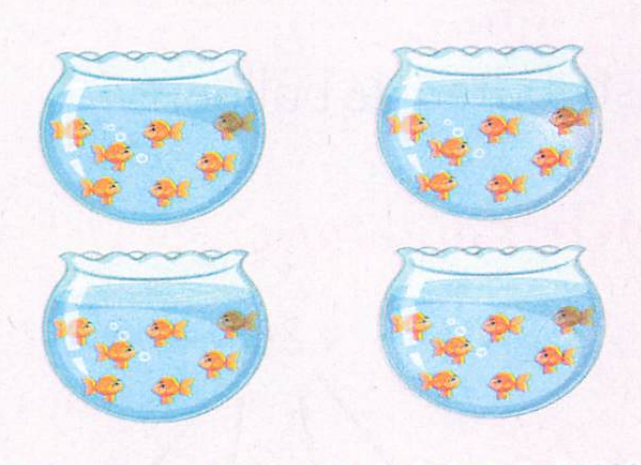


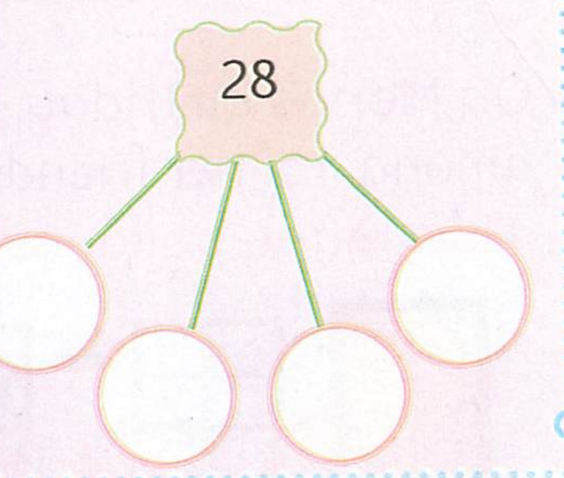


Answer the following:

There are 28 fish. Put them into 4 aquariums.

How many fish are there in each aquarium?



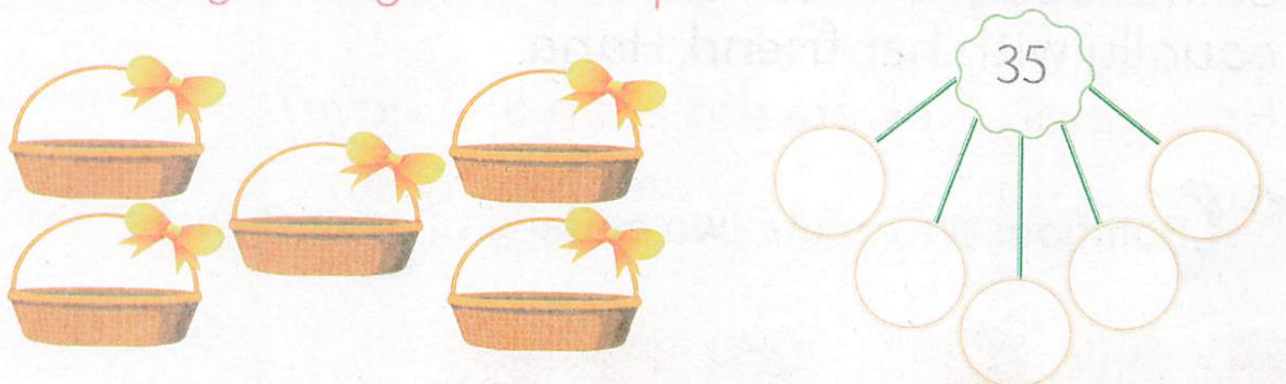


No. of aquariums = ...

No. of fish in each aquarium = ... fish

Sameh prepares baskets for oranges. He has 35 oranges. He wants to divide them equally into 5 baskets.

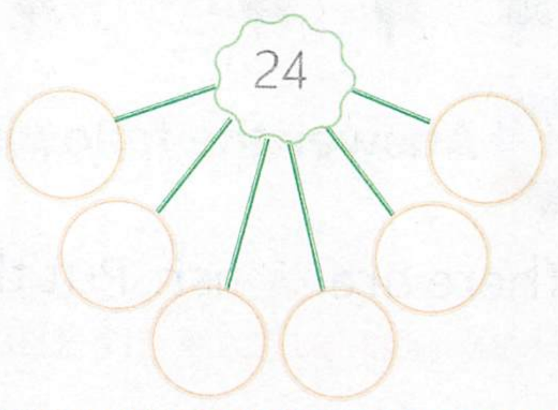
How many oranges will he put in each basket?



A teacher has 24 crayons. She wants to distribute them equally among 6 students.

How many crayons will each student take?

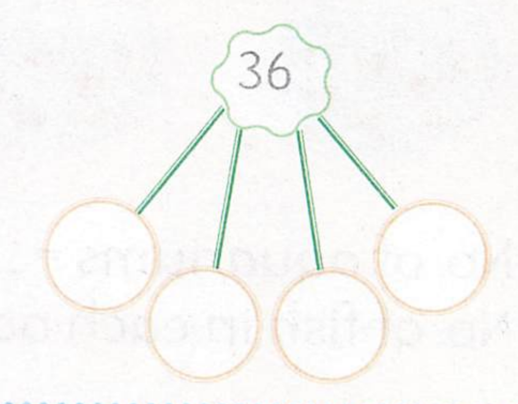




On Mona's birthday, she distributed 36 balloons among 4 of her friends.

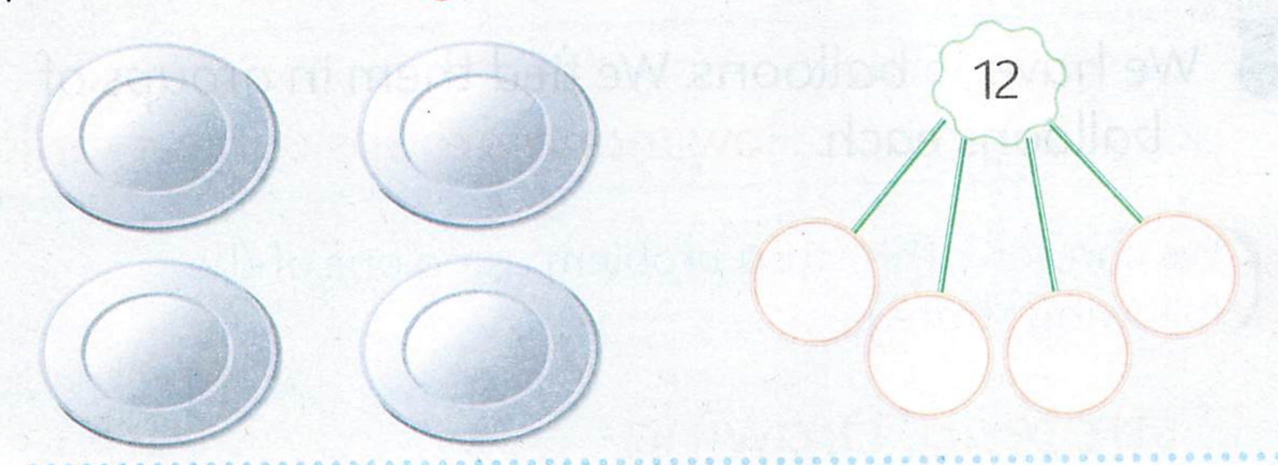
How many balloons did each friend have?





I can solve story problems involving division.

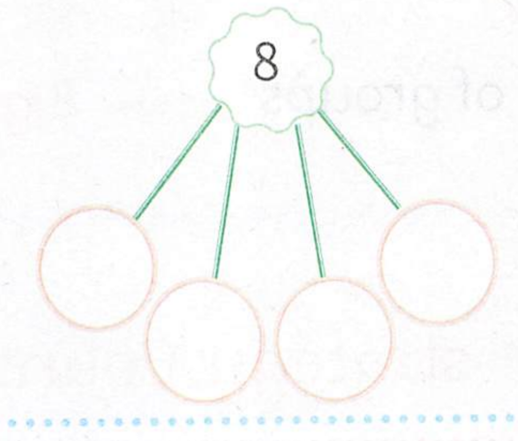
Salma wanted to distribute 12 cookies equally to 4 plates. How many cookies are there in each plate?





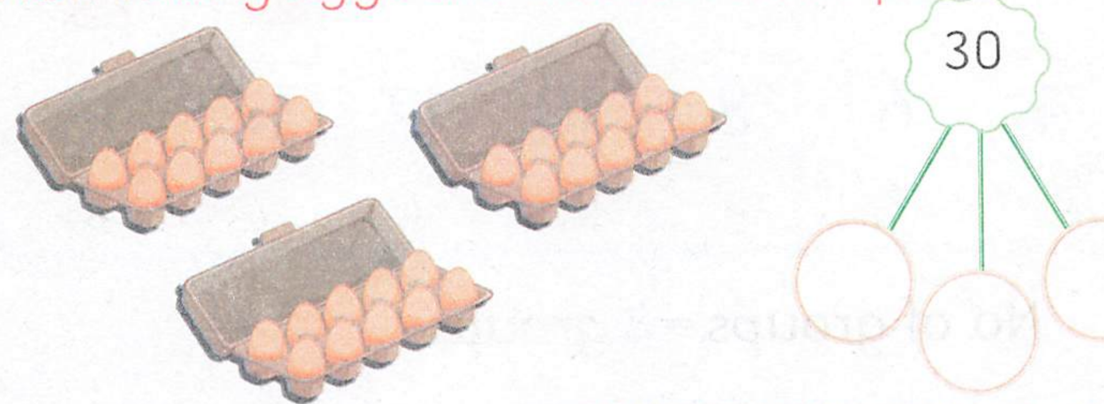
Amin distributed 8 apples among 4 of his friends without keeping any apples for himself. How many apples did every one take?





Ahmed has 30 eggs. He wanted to put them equally in 3 plates.

How many eggs are there in each plate?





Other strategies for division

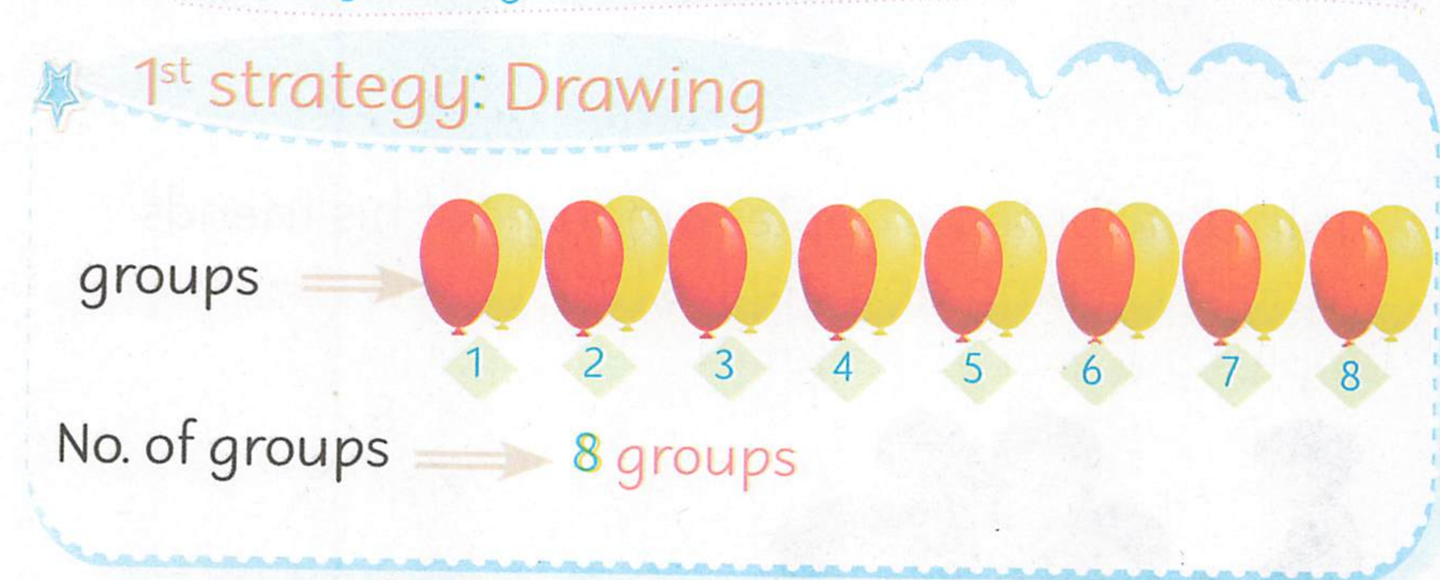




We have 16 balloons. We tied them in groups of 2 balloons each. How many groups can we make?

We can solve this story problem using one of the following strategies.

1st strategy: Drawing

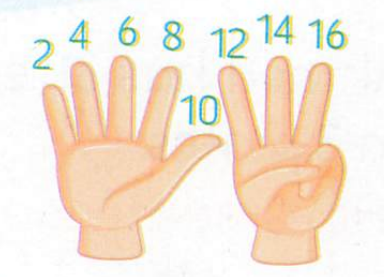


groups →

No. of groups → 8 groups

2nd strategy: Counting by multiples

Counting on by raising a finger each time.



2	4	6	8	10	12	14	16
1	2	3	4	5	6	7	8

No. of groups = 8 groups



2 Solve the following story problems as the previous example:

Each cat eats 2 fish. We have 18 fish.

How many cats can be fed?

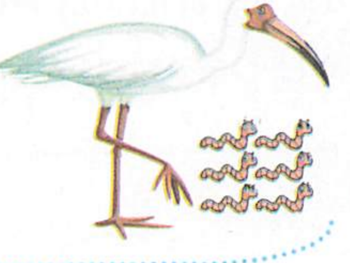


....

....

An ibis eats 6 worms. We have 24 worms.

How many ibis can be fed?



....

....

Each frog must eat 8 insects. We have 32 insects.

How many frogs can be fed?



....

....

Each crocodile eats 5 fish. We have 35 fish.

How many crocodiles can be fed?

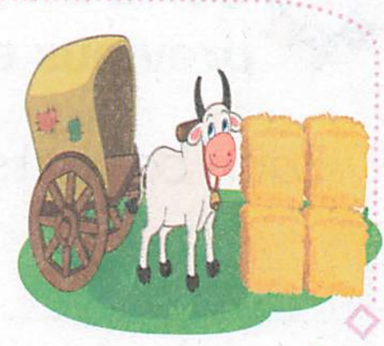


....

....

Each ox eats 4 bales of grass daily.
We have 28 bales. How many oxen can be fed? ....

....



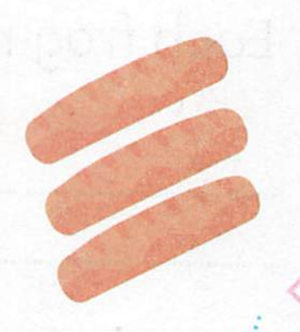
Salma saves 5 pounds a day.
How many days does she need to save 40 pounds? ....

....



Each person eats 3 loaves of bread daily.
We have 24 loaves of bread. How many people can be fed? ....

....



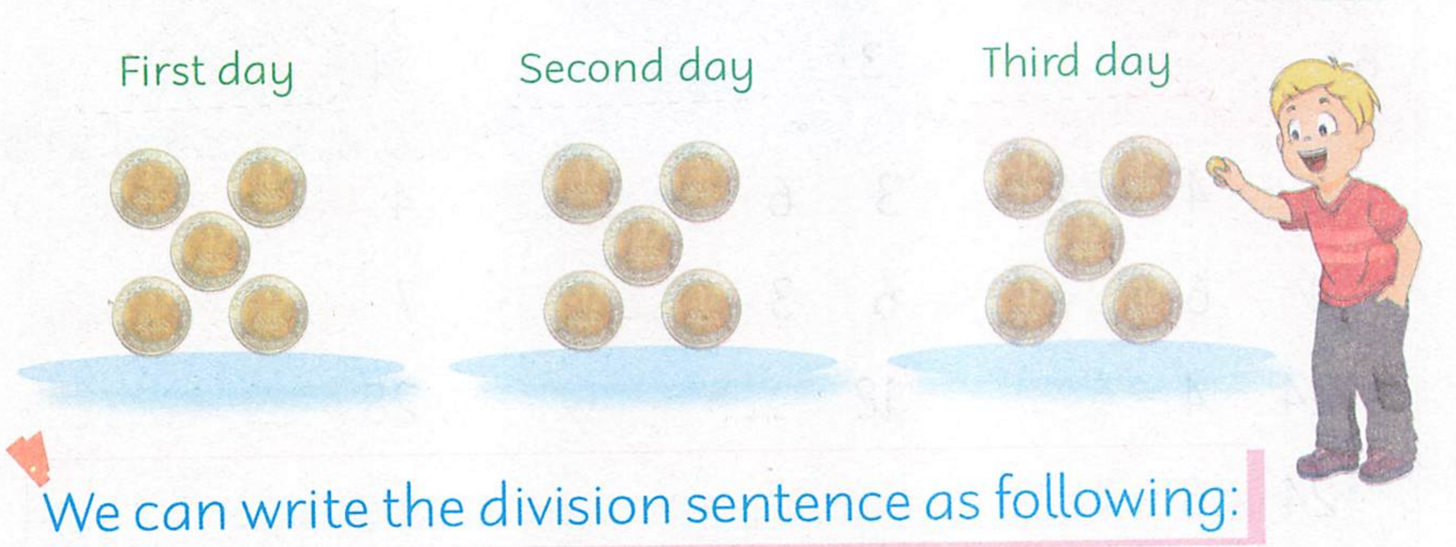
Each student takes 4 notebooks. We have 36 notebooks. How many students can we give notebooks? ....

....

The relation between multiplication and division



Ahmed spends 15 pounds in 3 days.
How much money does Ahmed spend a day?



We can write the division sentence as following:



dividend

quotient

We can say: 15 divided by 3 equals 5.

Practise

Shady distributed 12 apples equally among 4 of his friends. How many apples did everyone have?

Everyone's share = 12 ÷ 4
= 3 apples



Lesson 30

1 Write the missing factor in each triangle, then write the multiplication and division facts as the example:

Triangle: 24, 6, 4

6 × 4 = 24
4 × 6 = 24
24 ÷ 4 = 6
24 ÷ 6 = 4

Triangle: 18, 3, ○

3 × 6 = ...
6 × 3 = ...
18 ÷ .... = ...
.... ÷ .... = ...

Triangle: 28, 4, ○

4 × 7 = ...
7 × .... = ...
28 ÷ .... = ...
.... ÷ .... = ...

Triangle: 21, 7, ○

.... × .... = ...
.... × .... = ...
.... ÷ .... = ...
.... ÷ .... = ...

Triangle: 54, 6, ○

.... × .... = ...
.... × .... = ...
.... ÷ .... = ...
.... ÷ .... = ...

Triangle: 15, 3, ○

.... × .... = ...
.... × .... = ...
.... ÷ .... = ...
.... ÷ .... = ...

32
4

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...

36
9

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...

20
10

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...

24
8

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...

72
9

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...

42
6

...... × ...... = ...

...... × ...... = ...

...... ÷ ...... = ...

...... ÷ ...... = ...



2 Match the multiplication sentence to the division facts:

$3 \times 5 = 15$

$3 \times 8 = 24$

$6 \times 9 = 54$

$5 \times 7 = 35$

$8 \times 7 = 56$

$54 \div 6 = 9$
$54 \div 9 = 6$

$56 \div 7 = 8$
$56 \div 8 = 7$

$15 \div 3 = 5$
$15 \div 5 = 3$

$24 \div 3 = 8$
$24 \div 8 = 3$

$35 \div 5 = 7$
$35 \div 7 = 5$



3 Find the quotient:

24 ÷ 8 = ...

56 ÷ 7 = ...

27 ÷ 3 = ...

64 ÷ 8 = ...

48 ÷ 8 = ...

63 ÷ 7 = ...

35 ÷ 7 = ...

42 ÷ 7 = ...

18 ÷ 3 = ...

32 ÷ 4 = ...

36 ÷ 9 = ...

54 ÷ 9 = ...



4 Complete the missing number:

72 ÷ .... = 9

12 ÷ .... = 3

24 ÷ .... = 8

.... ÷ 7 = 4

21 ÷ .... = 3

40 ÷ .... = 8

35 ÷ .... = 7

63 ÷ 9 = ...

27 ÷ .... = 9

18 ÷ .... = 6

.... ÷ 4 = 8

.... ÷ 4 = 4

Review on Chapter Three



1 Find the result:

$3 \times 7 = \dots$	$8 \div 2 = \dots$	$40 \div 4 = \dots$
$4 \times 9 = \dots$	$12 \div 3 = \dots$	$45 \div 9 = \dots$
$8 \times 7 = \dots$	$18 \div 6 = \dots$	$9 \div 1 = \dots$
$7 \times 4 = \dots$	$32 \div 8 = \dots$	$42 \div 6 = \dots$
$9 \times 8 = \dots$	$25 \div 5 = \dots$	$21 \div 3 = \dots$



2 Write the fact families for each set of numbers:

15, 3, 5

$\dots \times \dots = \dots$

$\dots \times \dots = \dots$

$\dots \div \dots = \dots$

$\dots \div \dots = \dots$

28, 7, 4

$\dots \times \dots = \dots$

$\dots \times \dots = \dots$

$\dots \div \dots = \dots$

$\dots \div \dots = \dots$

24, 6, 4

$\dots \times \dots = \dots$

$\dots \times \dots = \dots$

$\dots \div \dots = \dots$

$\dots \div \dots = \dots$

54, 6, 9

$\dots \times \dots = \dots$

$\dots \times \dots = \dots$

$\dots \div \dots = \dots$

$\dots \div \dots = \dots$



3 Match the equal products:

3 × 4	6 × 4	4 × 4	6 × 3
3 × 8	2 × 6	2 × 9	2 × 8



4 Compare using (<, > or =):



5 × 3 .... 5 × 4

8 × 9 .... 6 × 9

6 × 3 .... 3 × 6

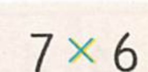
3 × 7 .... 5 × 8

9 × 4 .... 4 × 9

4 + 4 + 4 .... 4 × 3

7 × 6 .... 8 × 6

24 ÷ 3 .... 16 ÷ 4



5 Draw the clock hands to show the time:













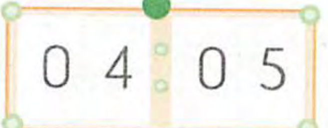


Review

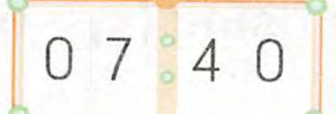


Match the clock to the suitable time:







09:50



Color the correct answer:

Twenty past five	05:30	05:20	05:15
Ten to eleven	10:50	11:10	11:50
Twenty to two	01:50	02:20	01:40
Twenty to five	04:40	04:30	04:45



Read and complete:

Karim celebrated his birthday.

start of the party



end of the party



Elapsed time is .... hours



9 Choose the correct answer:

- One of the multiples of 6 (63 - 35 - 36)
- One of the multiples of 9 (53 - 72 - 25)
- One of the multiples of 3 (30 - 13 - 5)
- One of the multiples of 8 (42 - 9 - 16)



10 Complete the multiples of the following numbers, then answer:

The multiples of 3	9, ..., 15, ..., ..., ..., ...
The multiples of 10	........., 30, ..., ..., ..., ..., ...
The multiples of 5	10, ..., 20, ..., ..., ..., ...
The multiples of 4	8, ..., ..., 20, ..., ..., ...
The common multiples of 5 and 10 are	........., ..., ...
The common multiples of 3 and 4 are	........., ..., ...



11

Use the 120 chart to write the multiples of 5 that are between 13 and 47: ....



12

Use the 120 chart to write the common multiples of 2 and 3 that are less than 20: ....

Review



There are 5 boxes of crayons. Each box has 8 crayons. What is the total number of the crayons? ....

....



There are 7 bunches of flowers. Each bunch has 6 flowers. What is the total number of the flowers? ....

....



Salma distributed 12 cookies equally in 3 plates. How many cookies were there in each plate?

No. of cookies = ... ÷ .... = ... cookies



Mazin has 24 books. He wanted to put them in 4 boxes. How many books will he put in each box?

No. of books = ... ÷ .... = ... books

Chapter Four



Chapter Four Outcomes

Lesson (31)

- Identify the attributes of two-dimensional shapes.
- Define categories based on attributes.
- Sort two-dimensional shapes based on their attributes.
- Define polygon and parallelogram.

Lessons (32,33)

- Describe the attributes of quadrilaterals.
- Apply rules to sort quadrilaterals.
- Compare and contrast quadrilaterals.
- Combine quadrilaterals to create a picture.
- Sort quadrilaterals using a Venn diagram.
- Create a bar graph representing quadrilaterals to create a picture.

Lessons (34,35)

- Use manipulatives to build rectangles with specified dimensions.
- Calculate the area of rectangles in square units.
- Determine the area of rectangles using strategies related to multiplication.

Lesson (36)

- Create and describe multiple rectangles with the same area.
- Explain and model the commutative property of multiplication.

Lesson (37)

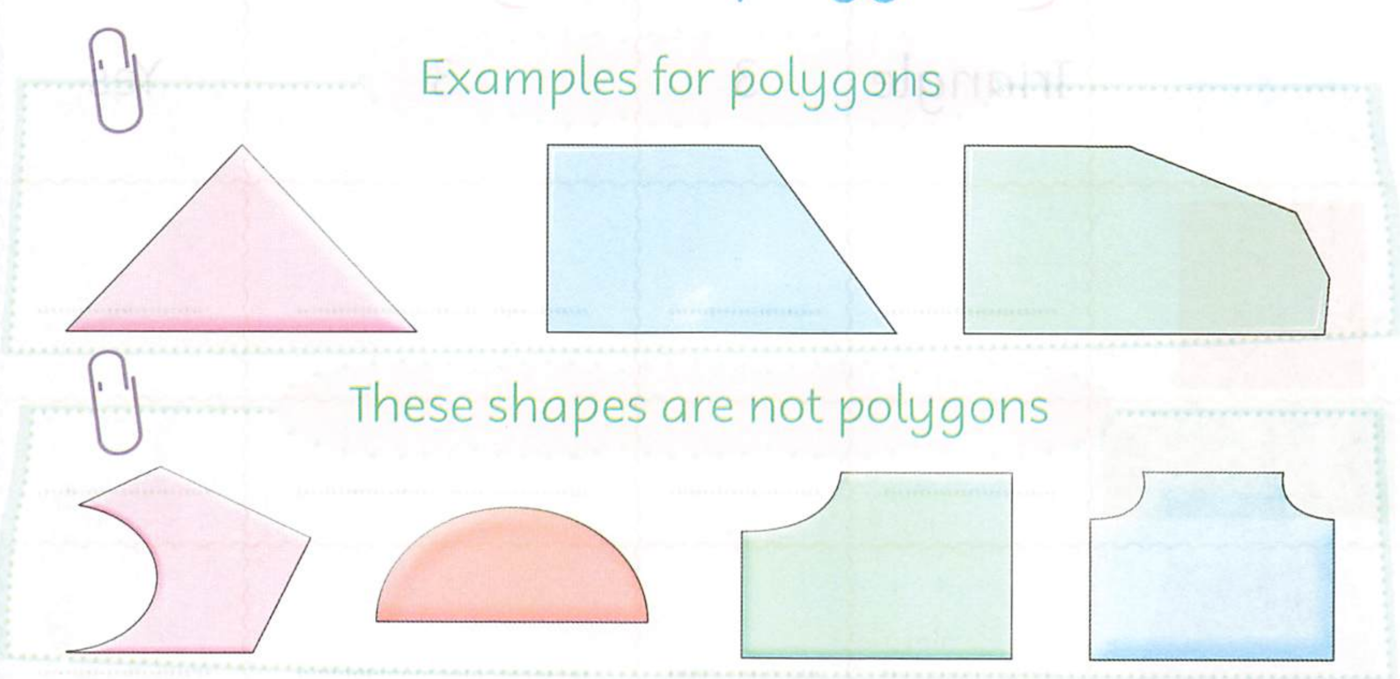
- Define area in their own words.
- Apply strategies to measure area.

Lessons (38-40)

- Divide arrays into smaller arrays to solve multiplication problems.
- Explain the Distributive property of multiplication.
- Explain why dividing arrays makes it easier to solve multiplication problems.
- Apply the Distributive property to solve multiplication problems.
- Model the Distributive property of multiplication using arrays.
- Reflect on understanding of multiplication and the Distributive Property of multiplication.
- Apply the Distributive property to solve multiplication problems.

Polygons

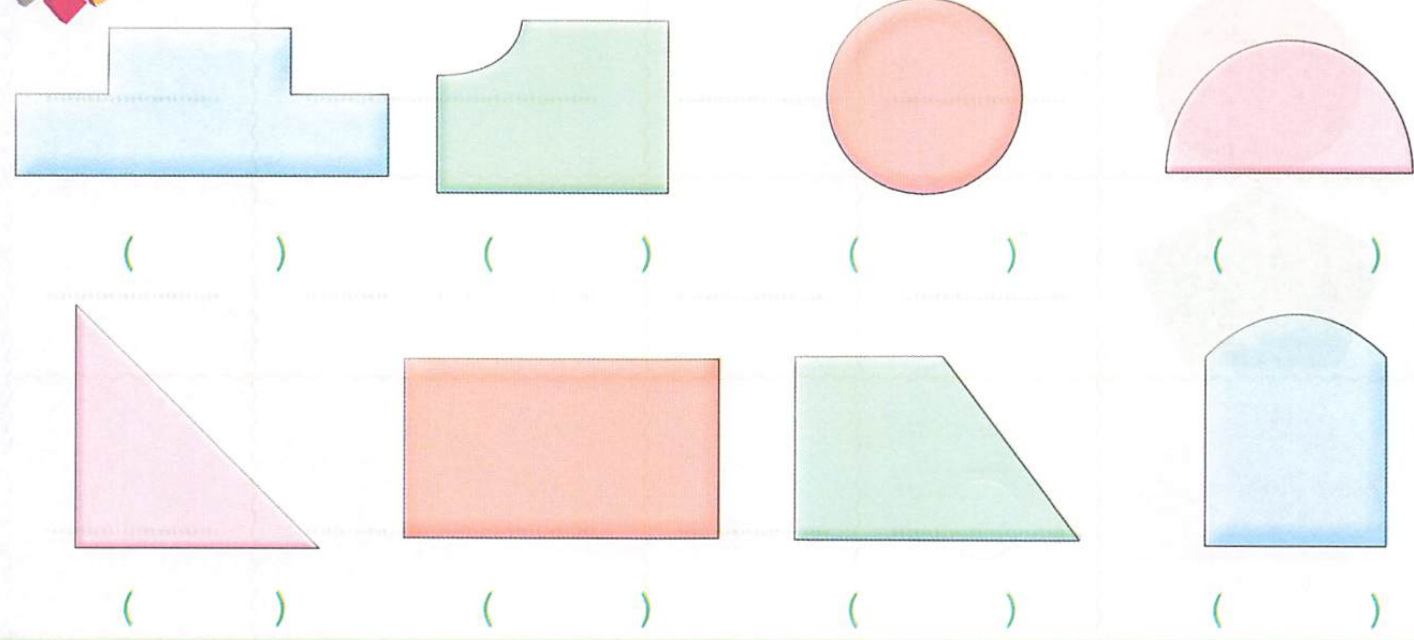
Learn polygons



The polygon is a closed two - dimensional shape with three or more sides.



1 Tick (✓) below the polygon:

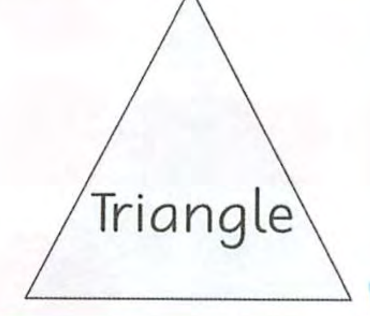


2 Complete the table and determine whether the shape is a polygon or not as the example:

Shape	Name	No. of sides	No. of vertices	Polygon
	Triangle	3	3	Yes
	....	....	....	....
	....	....	....	....
	....	....	....	....
	....	....	....	....
	....	....	....	....
	....	....	....	....
	....	....	....	....



3 Complete:



Triangle

.... vertices
.... sides

Square

.... vertices
.... sides

Rectangle

.... vertices
.... sides

Parallelogram

.... vertices
.... sides

Circle

.... vertices
.... sides

Trapezium

.... vertices
.... sides

Rhombus

.... vertices
.... sides

Pentagon

.... vertices
.... sides

Hexagon

.... vertices
.... sides

Lesson 31

4 Write the name of the two-dimensional shape, then circle the similar shapes:

....

....

....

....

....

5 Read, write the name of each shape according to its attributes, then circle it:

This shape has 5 sides and 5 vertices
Name ....

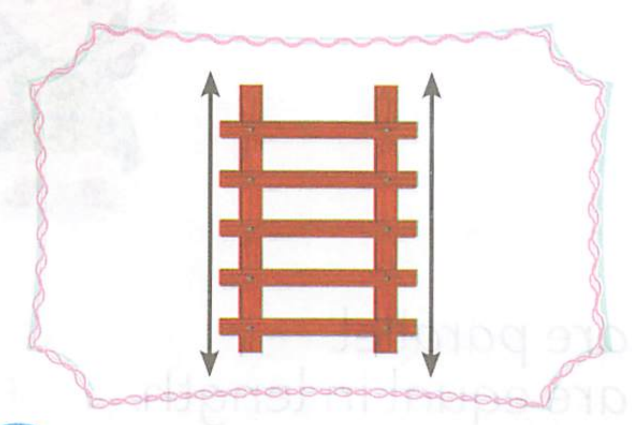
This shape has no sides or vertices.
Name ....

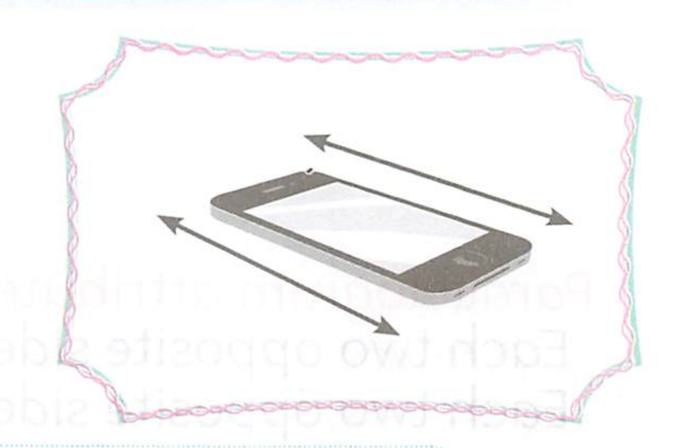
This shape has 3 sides and 3 vertices.
Name ....

This shape has 6 sides and 6 vertices.
Name ....

Two parallel lines

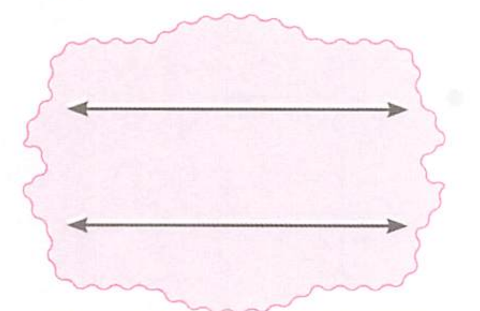
Parallel lines can go on forever and never intersect.



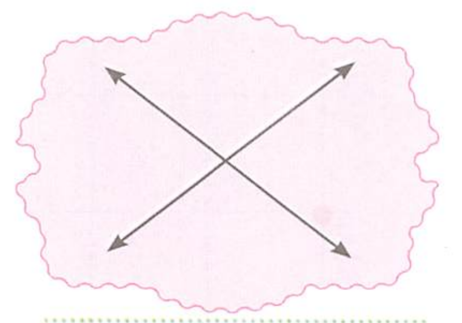




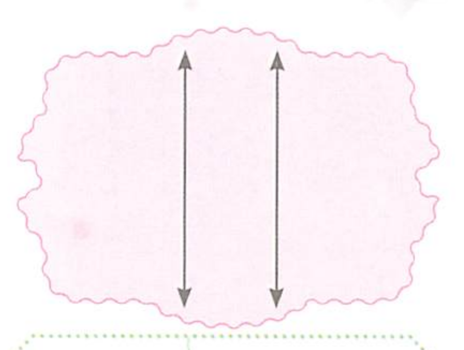
Color the correct answer as the example:



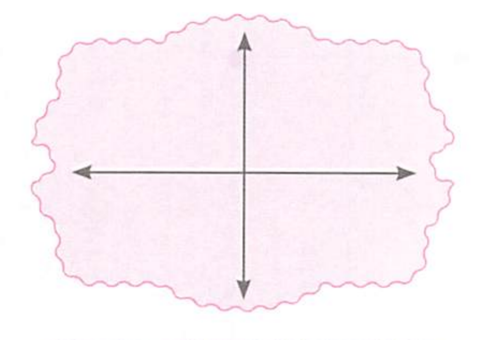
parallel | not parallel



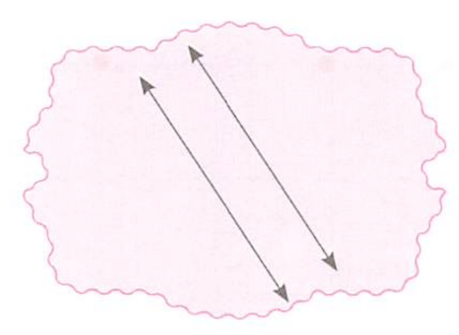
parallel | not parallel



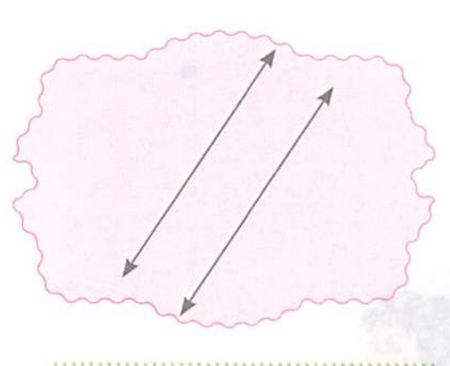
parallel | not parallel



parallel | not parallel



parallel | not parallel



parallel | not parallel

Lesson 31

Parallelogram

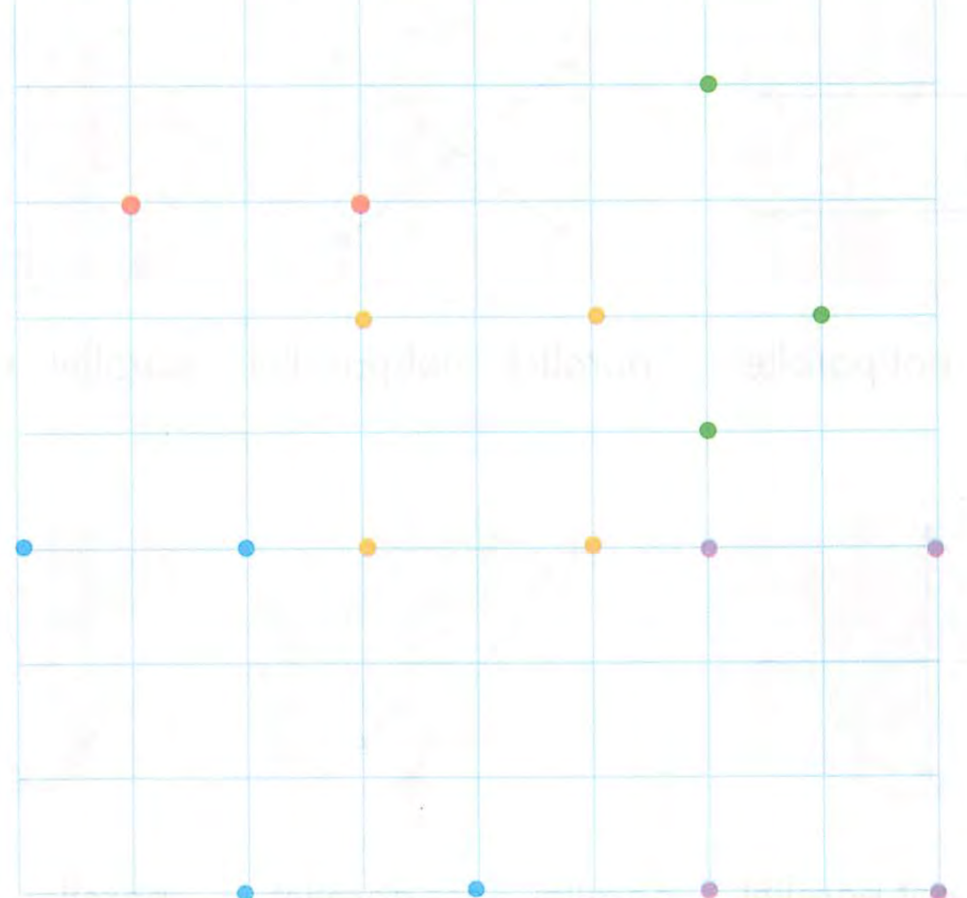
Parallelogram is a quadrilateral with opposite sides parallel.





Parallelogram attributes
- Each two opposite sides are parallel.
- Each two opposite sides are equal in length.

1 Join the following dots to get a parallelogram:



 The square, rectangle and rhombus are parallelogram. 

 I learnt parallelogram attributes.



2 Tick (✓) below the parallelogram:

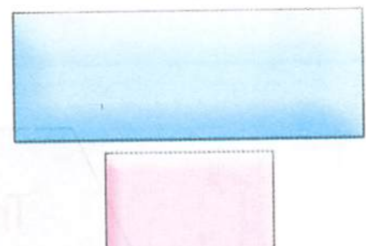
( ) ( ) ( )

( ) ( ) ( )

( ) ( ) ( )

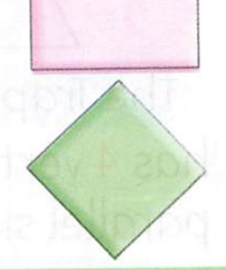


3 Write the name of each parallelogram:



1 ....

2 ....



3 ....



Attributes of quadrilaterals

Chapter (4)
Lessons
(32,33)



The quadrilateral: is a two-dimensional shape with 4 vertices and 4 sides.

Rectangle

The rectangle

has 4 sides, two short equal and parallel sides and two long equal and parallel sides.



The square

has 4 vertices, 4 equal sides. Each opposite sides are parallel .

Parallelogram

The parallelogram

has 4 vertices and 4 sides. Each two opposite sides are parallel and equal.

Rhombus

The rhombus

has 4 vertices, 4 equal sides. Each two opposite sides are parallel.

Trapezium

The Trapezium

has 4 vertices with only two parallel sides.





I learnt two-dimensional shapes attributes.

1 Complete:

1- All shapes that have 4 vertices and 4 sides are called ....

2- The shape that has four equal sides and not a square is ....

3- The shape with only 2 parallel sides is ....

4- The shape with 2 short equal sides and 2 long equal sides is ....

5- The trapezium is a quadrilateral with .... sides and .... vertices.

6- The number of sides of [pentagon] = ...

7- Any shape formed of 3 sides or more is ....

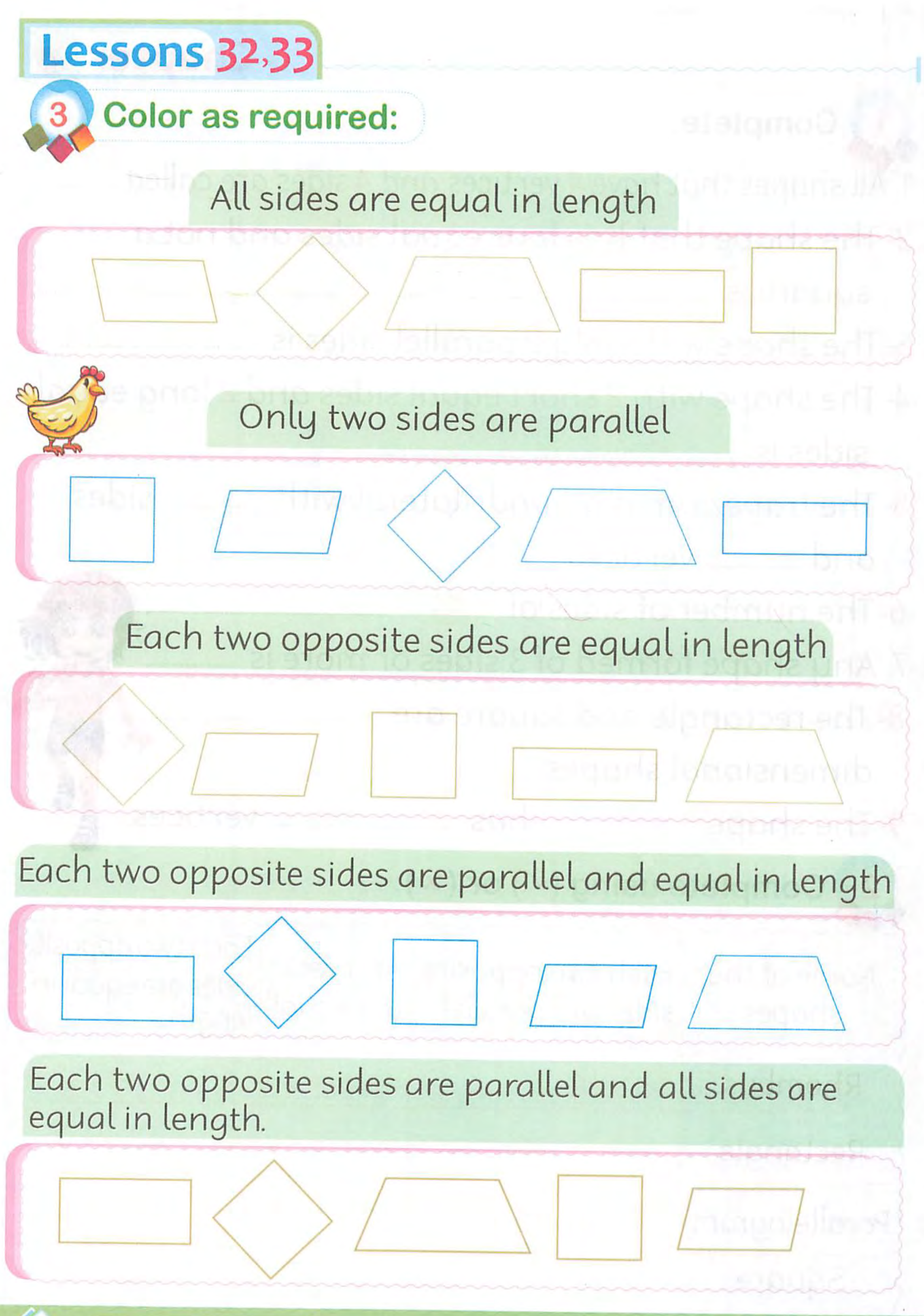
8- The rectangle and square are .... dimensional shapes.

9- The shape [shape] has .... vertices.

2 Complete using (✓) or (×):

Name of the shapes	Each two opposite sides are parallel	All sides are equal	Each two opposite sides are equal in length
Rhombus			
Rectangle			
Parallelogram			
Square			

3 Color as required:





4 Use Venn diagram to classify the following shapes:

Each two opposite sides are equal in length

Four equal sides

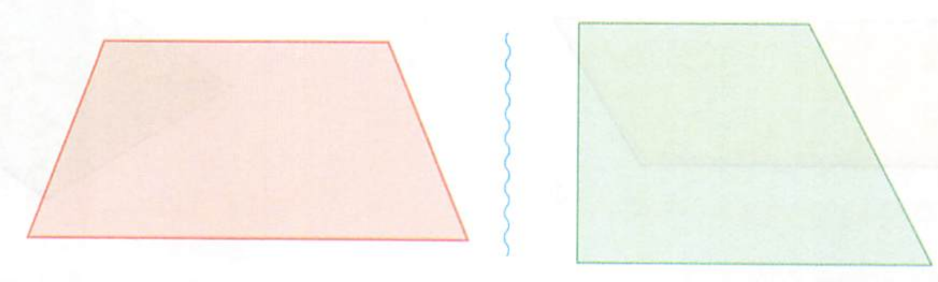
Lessons 32,33

Trapezium



Trapezium is a quadrilateral with 2 parallel sides and 2 non-parallel sides.



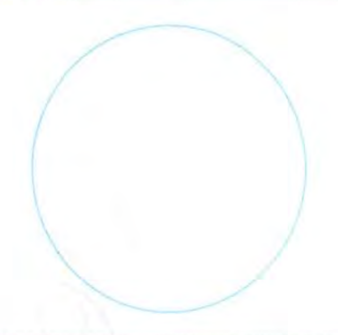




1 Circle the trapezium:



2 Color each shape, its name and its attributes in the same color:

 Square		a quadrilateral that has only one pair of parallel sides.
 Rectangle		a quadrilateral that has 2 long equal sides and 2 short equal sides
 Trapezium		a shape with no sides or vertices
 Circle		a quadrilateral with 4 equal sides

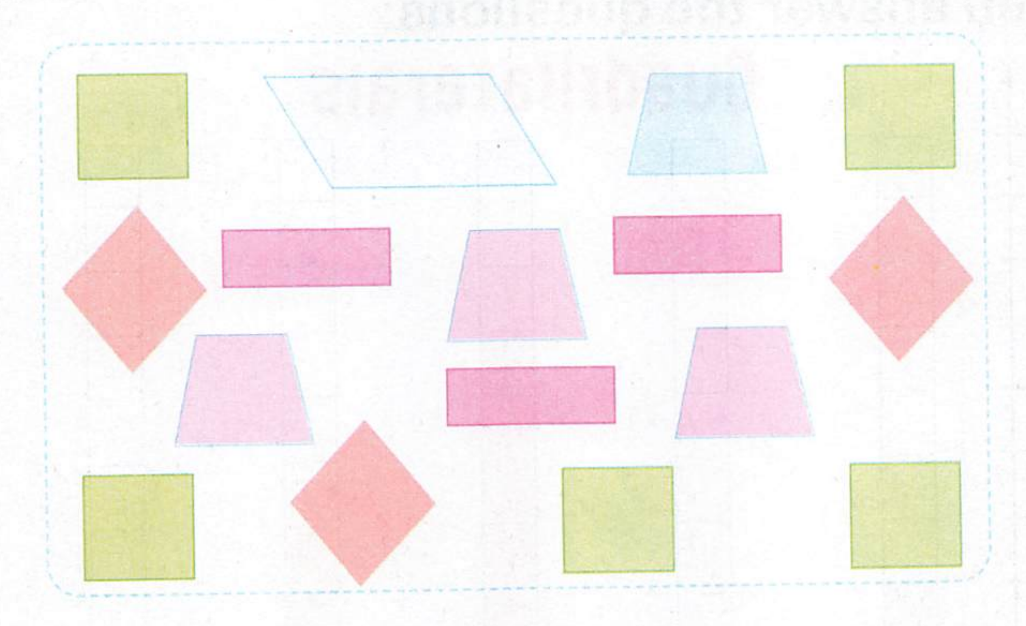


3 Color using the code:





Represent number of quadrilaterals on the bar graph:



Quadrilaterals

No. of shapes

10
9
8
7
6
5
4
3
2
1
0

Rhombus, Rectangle, Trapezium, Square, Parallelogram

Quadrilaterals

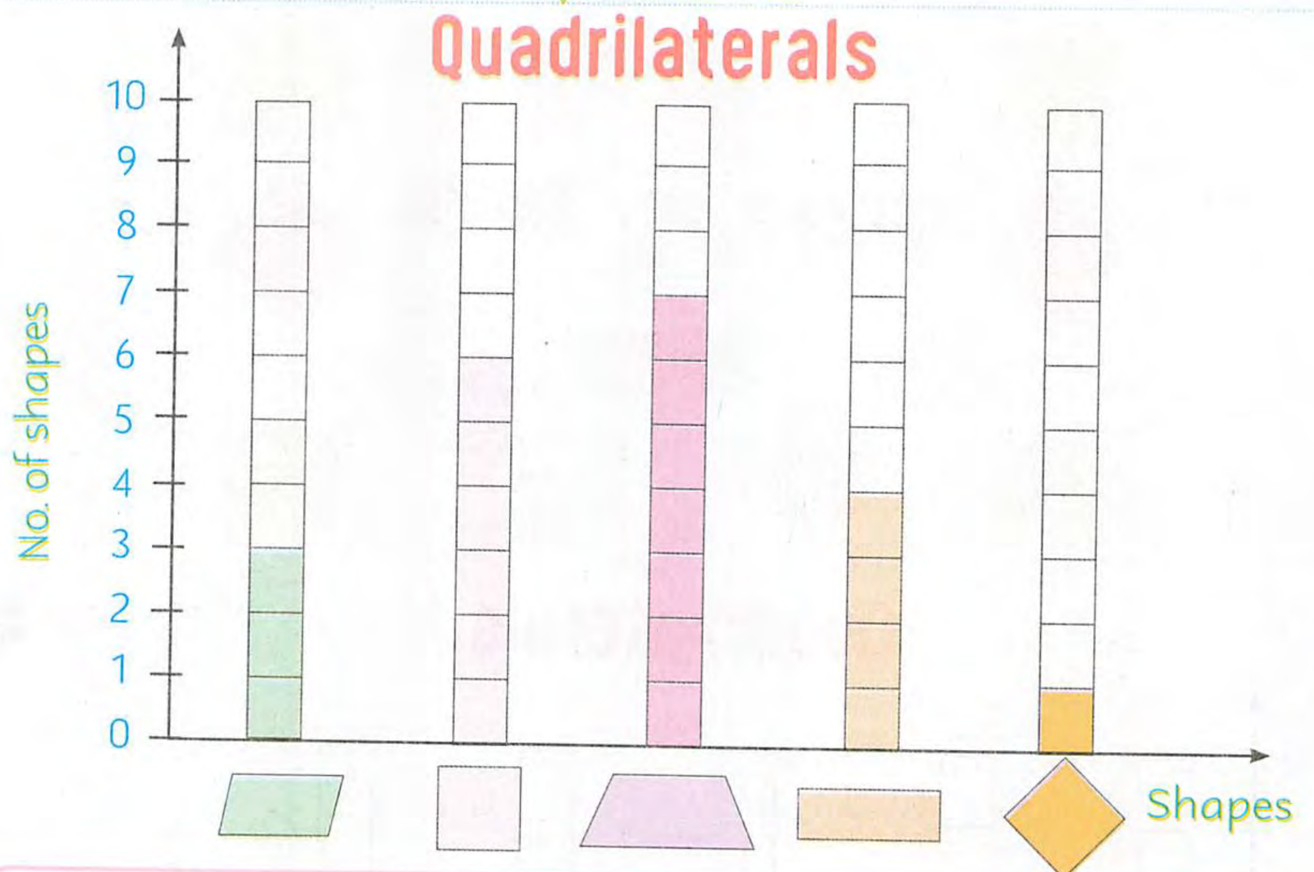
1. Which shape has the greatest number? ....

2. Which shape has the smallest number? ....

Lessons 32,33



Complete the following table using the bar graph, then answer the questions:



Shape	Number
Rectangle	....
Parallelogram	....
Square	....
Trapezium	....
Rhombus	....

- The most frequent shape is ....
- The least frequent shape is ....
- The difference between the most frequent and the least frequent shapes is ....

Area

Chapter (4)
Lessons (34,35)

Area is the number of square units needed to cover a surface.

1	2	3	4
5	6	7	8
9	10	11	12

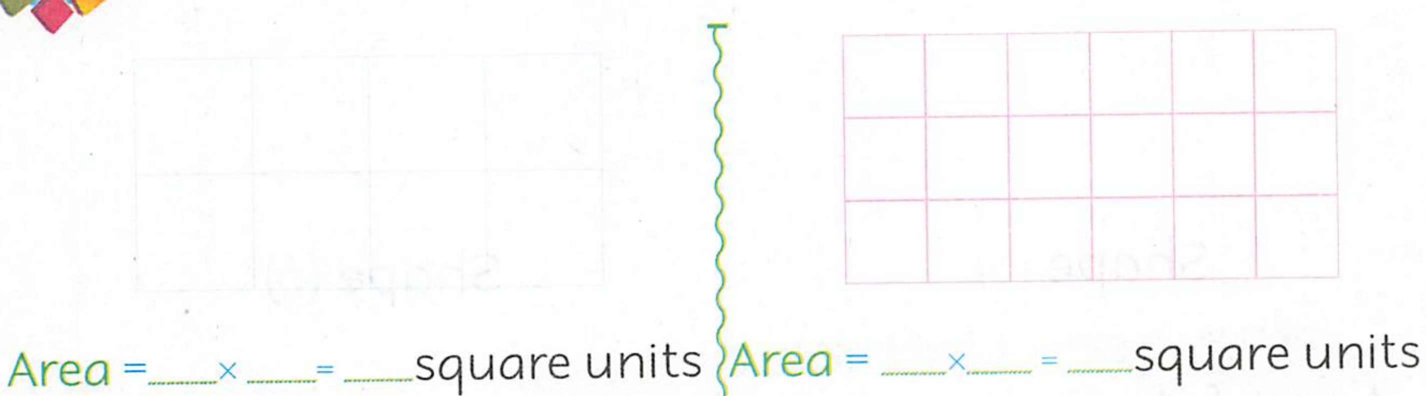
No. of squares = 12

Area = No. of rows × No. of columns

Area = 3 X 4 =12 square units

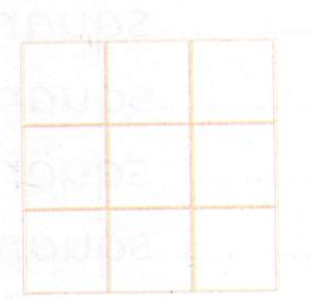


1 Calculate the area of each shape:



Area = ____ × ____ = ____ square units

Area = ____ × ____ = ____ square units



Area = ____ × ____ = ____ square units



Area = ____ × ____ = ____ square units

I learnt to find the area of arrays.



2 Calculate the area of rectangles in square units:



Shape (1)



Shape (2)



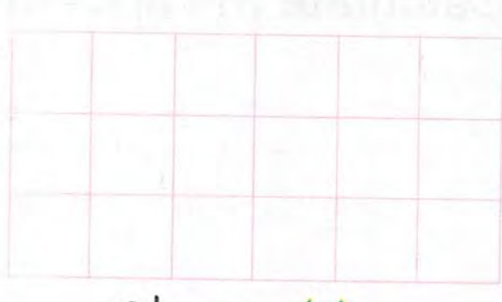
Shape (3)



Shape (4)



Shape (5)



Shape (6)

Area of shape (1) = ... square units.

Area of shape (2) = ... square units.

Area of shape (3) = ... square units.

Area of shape (4) = ... square units.

Area of shape (5) = ... square units.

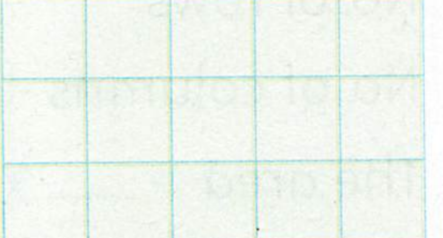
Area of shape (6) = ... square units.



3 Calculate the area of the following arrays as the example:



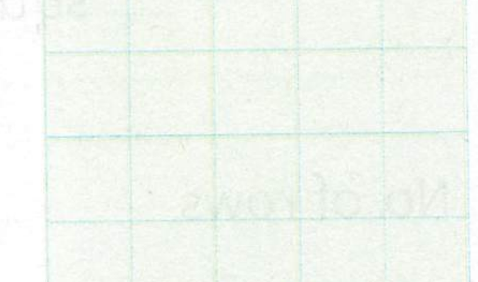
The area = 3 X 5 = 15 ☐



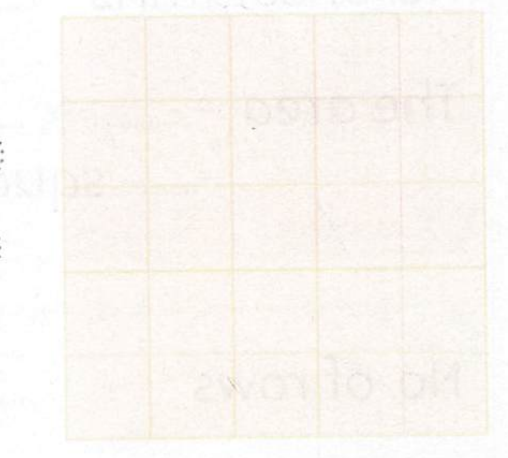
The area = ____ X ____ = ____ ☐



The area = ____ X ____ = ____ ☐



The area = ____ X ____ = ____ ☐



The area = ____ X ____ = ____ ☐





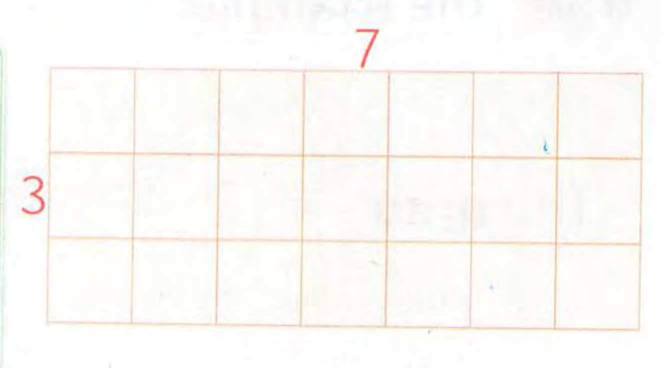
Calculate the area of the following rectangles:

No. of rows = 3

No. of columns = 7

The area = ... X ....

= .... square units



No. of rows = ...

No. of columns = ...

The area = ... X ....

= .... square units



No. of rows = ...

No. of columns = ...

The area = ... X ....

= .... square units



No. of rows = ...

No. of columns = ...

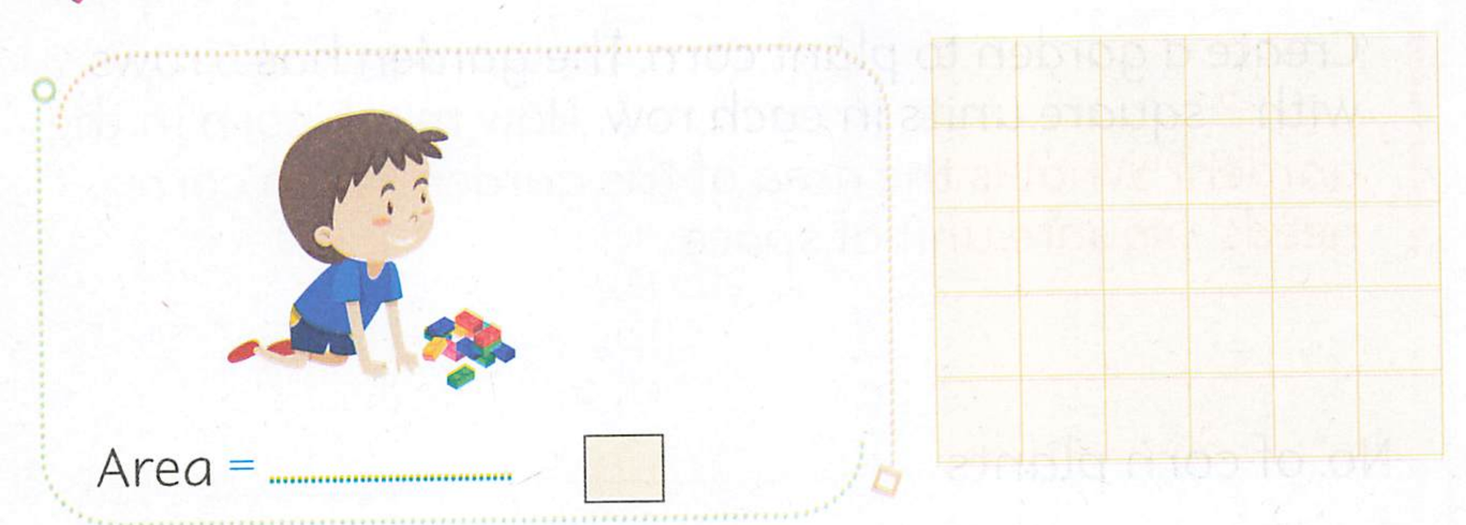
The area = ... X ....

= .... square units

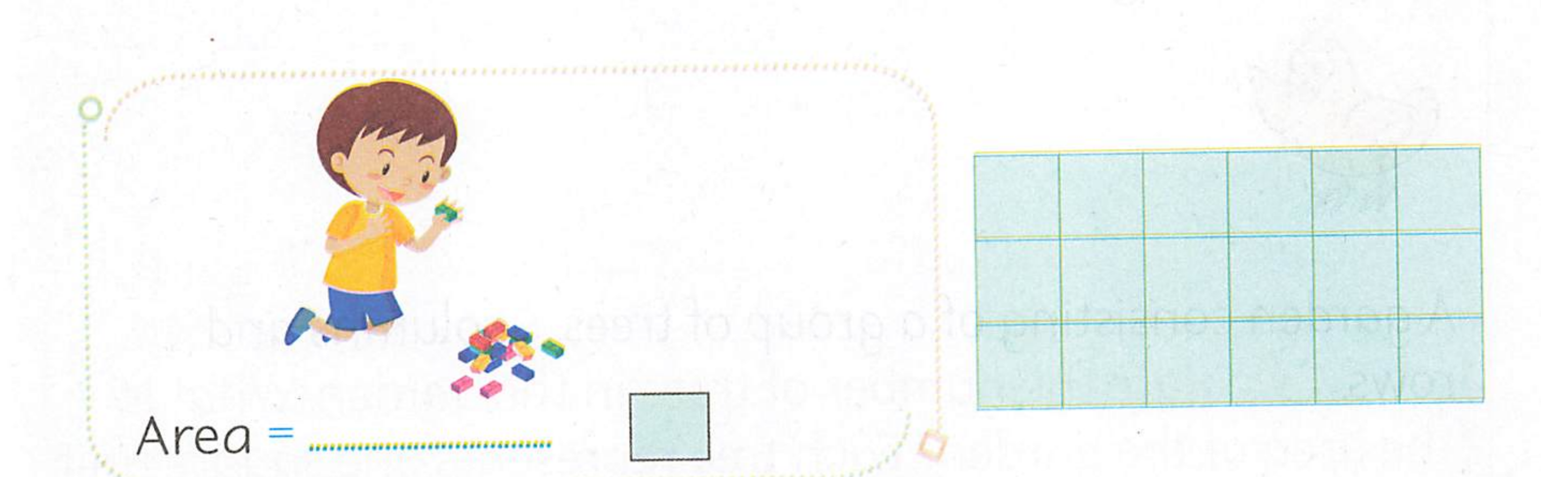




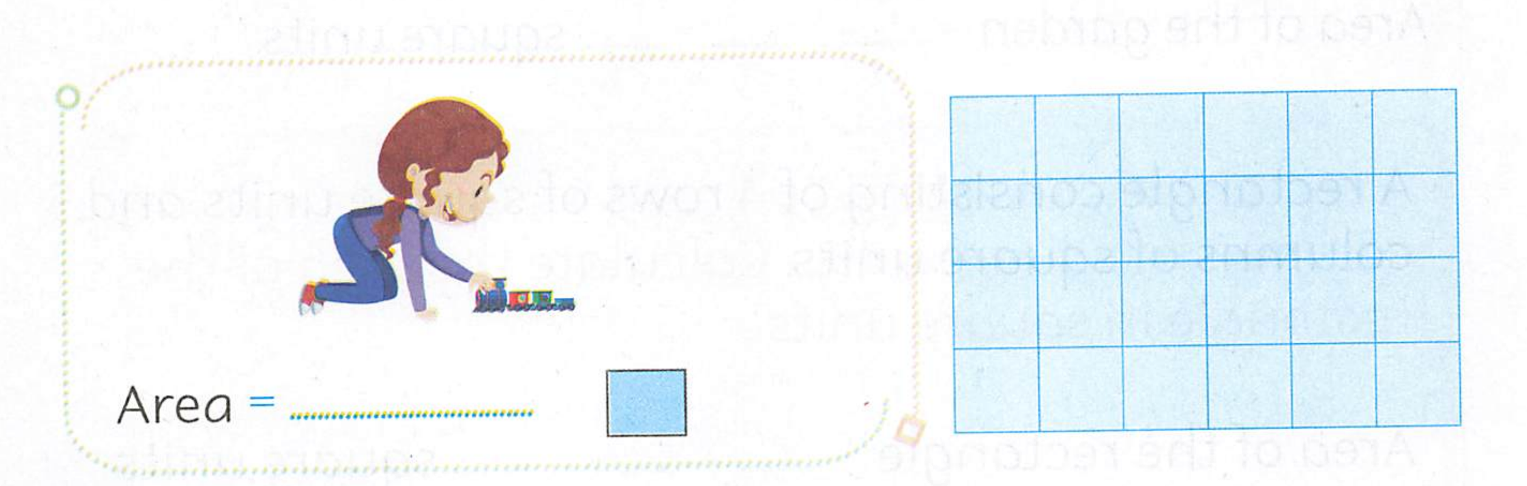
5 Calculate the area of the following shapes:



Area = ...



Area = ...



Area = ...

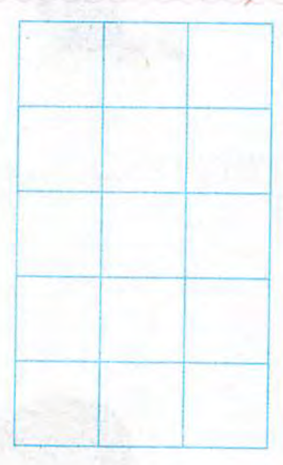


6 Answer the following questions:

Create a garden to plant corn. The garden has 5 rows with 3 square units in each row. How much corn in the garden? What is the area of the garden? Each corn needs 1 square unit of space.

No. of corn plants = ...

Area of the garden = ...





A garden consisting of a group of trees, 6 columns and 4 rows. Calculate the number of trees in the garden. What is the area of the garden? Each tree represents one square unit.

No. of trees = ... trees

Area of the garden = ... X ...... = ... square units

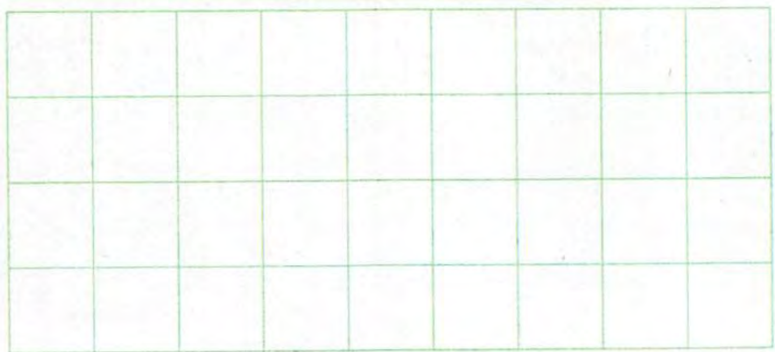
A rectangle consisting of 4 rows of square units and 3 columns of square units. Calculate the area of the rectangle in square units.

Area of the rectangle = ... X ...... = ... square units



7 Draw rectangles on the grid using the required dimensions:

A rectangle with dimensions of 5 units and 3 units.



A rectangle with dimensions of 7 units and 4 units.



A rectangle with dimensions of 6 units and 2 units.

Chapter (4) Lesson (36)

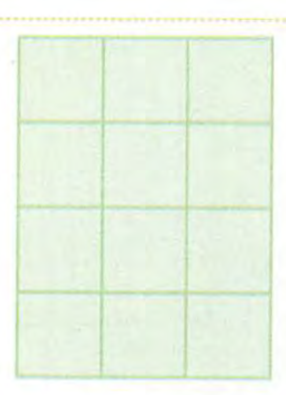
Creating rectangles with equal areas



No. of rows = ...

No. of columns = ...

No. of square units = ...



No. of rows = ...

No. of columns = ...

No. of square units = ...

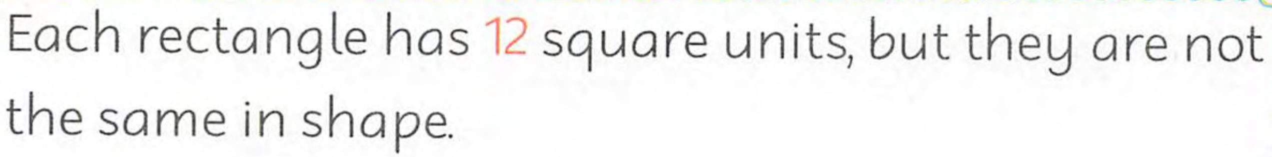
 ×  =  × .... = ...

The property used in the previous multiplication sentence is ....



Each rectangle has 12 square units, but they are not the same in shape.

Shapes maybe different but still have the same area.





- I learnt to create equal rectangles.
- I learnt the area using arrays.



1 Complete:

The area of rectangle (4×3) = The area of rectangle (3×.........)

The area of rectangle (5×2) = The area of rectangle (.........×5)

The area of rectangle (......×6) = The area of rectangle (.........×5)



2 Draw the shapes with the same area on the other side of the grid:





3 Draw an array to find the product of 4 × 8 :

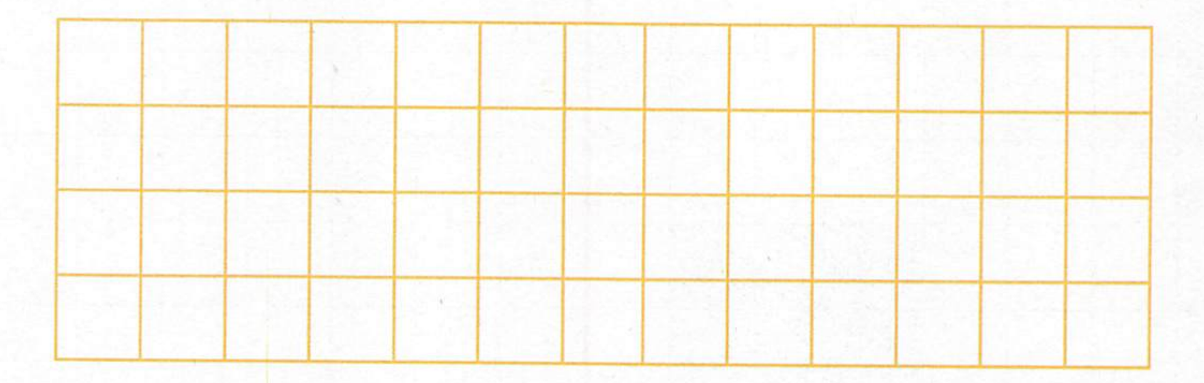


4 X 8 = ...



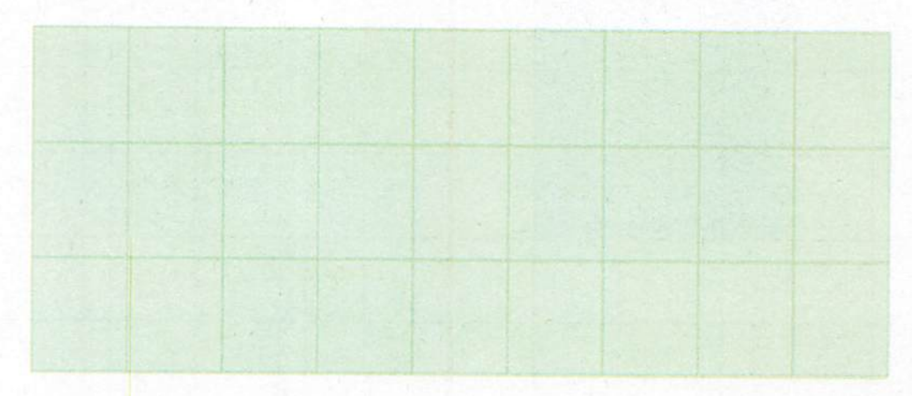
4 Check using the array that 3 × 4 = 4 × 3 on the grid:







5 Calculate the area of the rectangle:



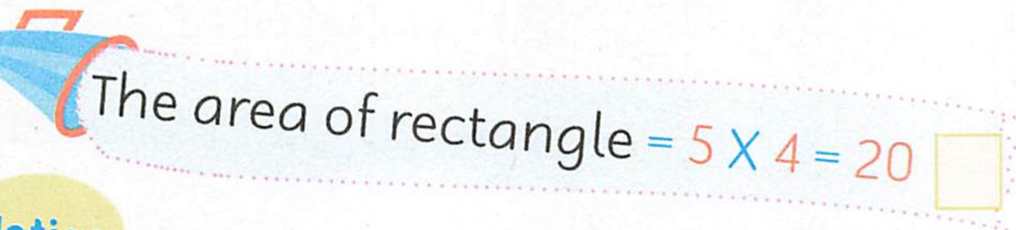
Area of rectangle = ... X .... = ... square units

Chapter (4)
Lesson
(37)

Strategies of measuring area

To calculate the area of the rectangle, we should know the two dimensions through the number of rows and columns

No. of rows = 5 No. of columns = 4





The area of rectangle = 5 X 4 = 20 □

Notice

No. of rows and columns represent the two dimensions of the rectangle.
No. of horizontal squares represent the first dimension.
No. of vertical squares represent the second dimension.

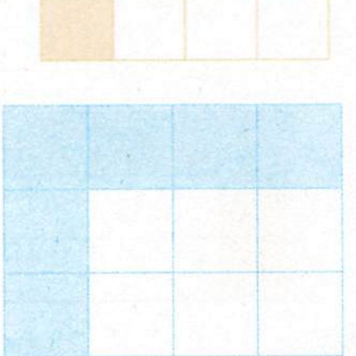
1 Calculate the area of the rectangle using square units:



The first dimension =..................
The second dimension =..................
The area of rectangle = ... X ....
=.................. □



The first dimension =..................
The second dimension =..................
The area of rectangle = ... X ....
=.................. □

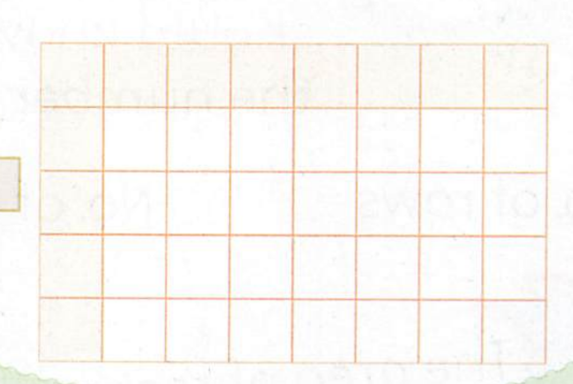




- I learnt strategies to calculate the area of the array.

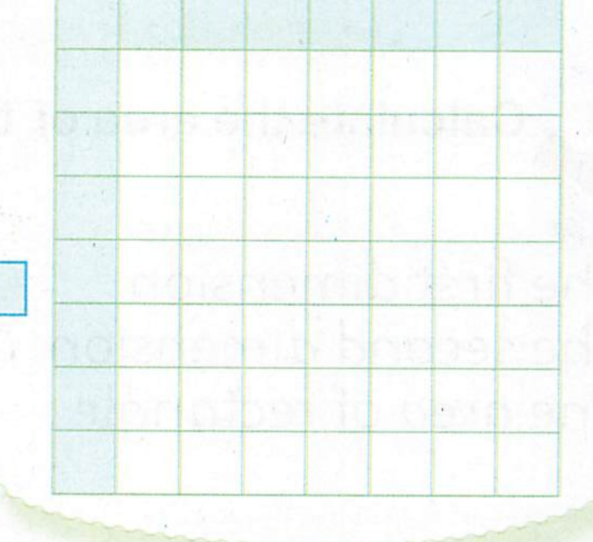


2 Calculate the area of the following shapes:

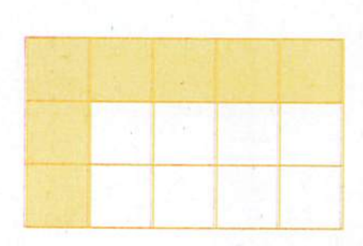


The area = ... X .... = ...

The area = ... X .... = ...

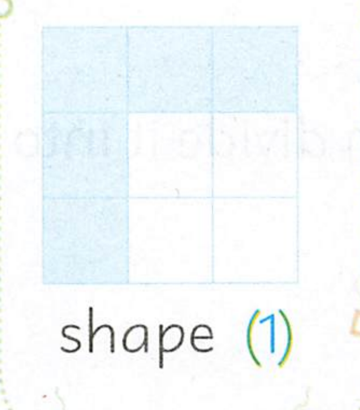


The area = ... X .... = ...

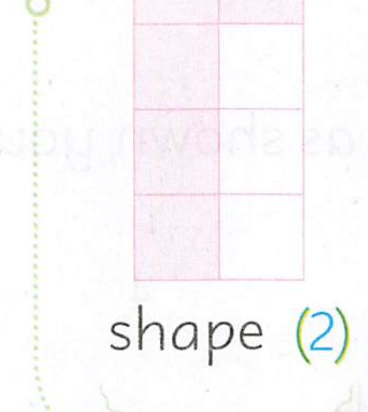


The area = ... X .... = ...

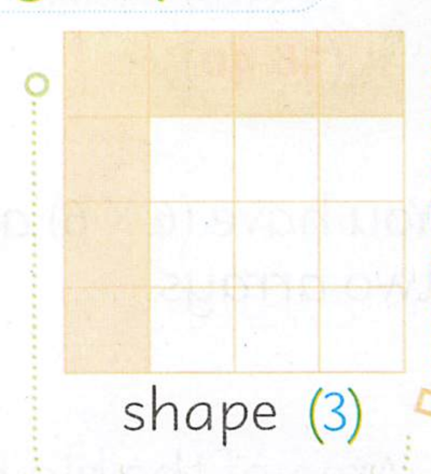
3 Calculate the area of the following shapes:



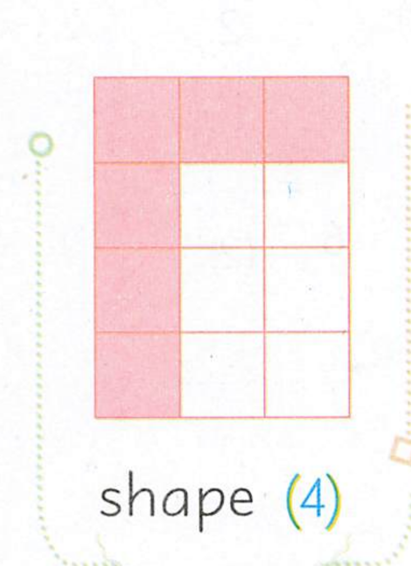
shape (1)



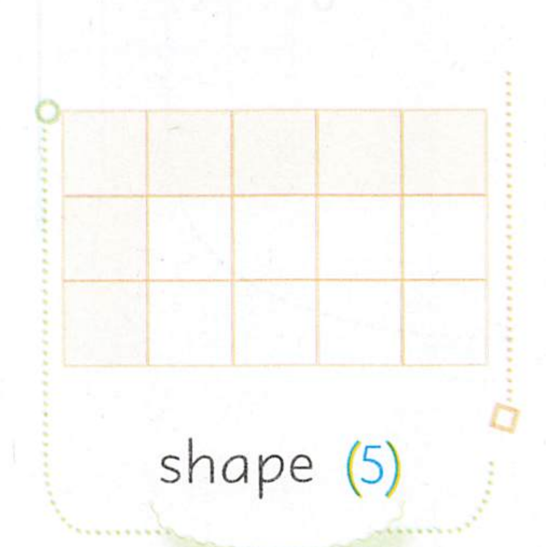
shape (2)



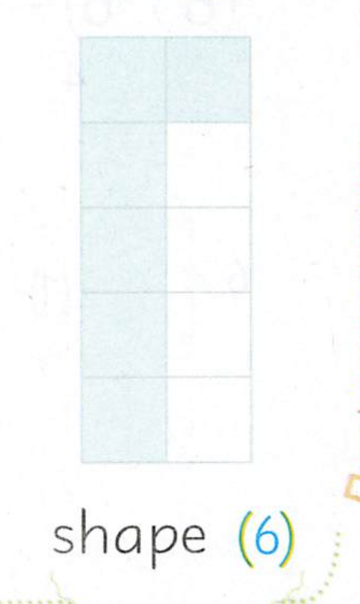
shape (3)



shape (4)



shape (5)



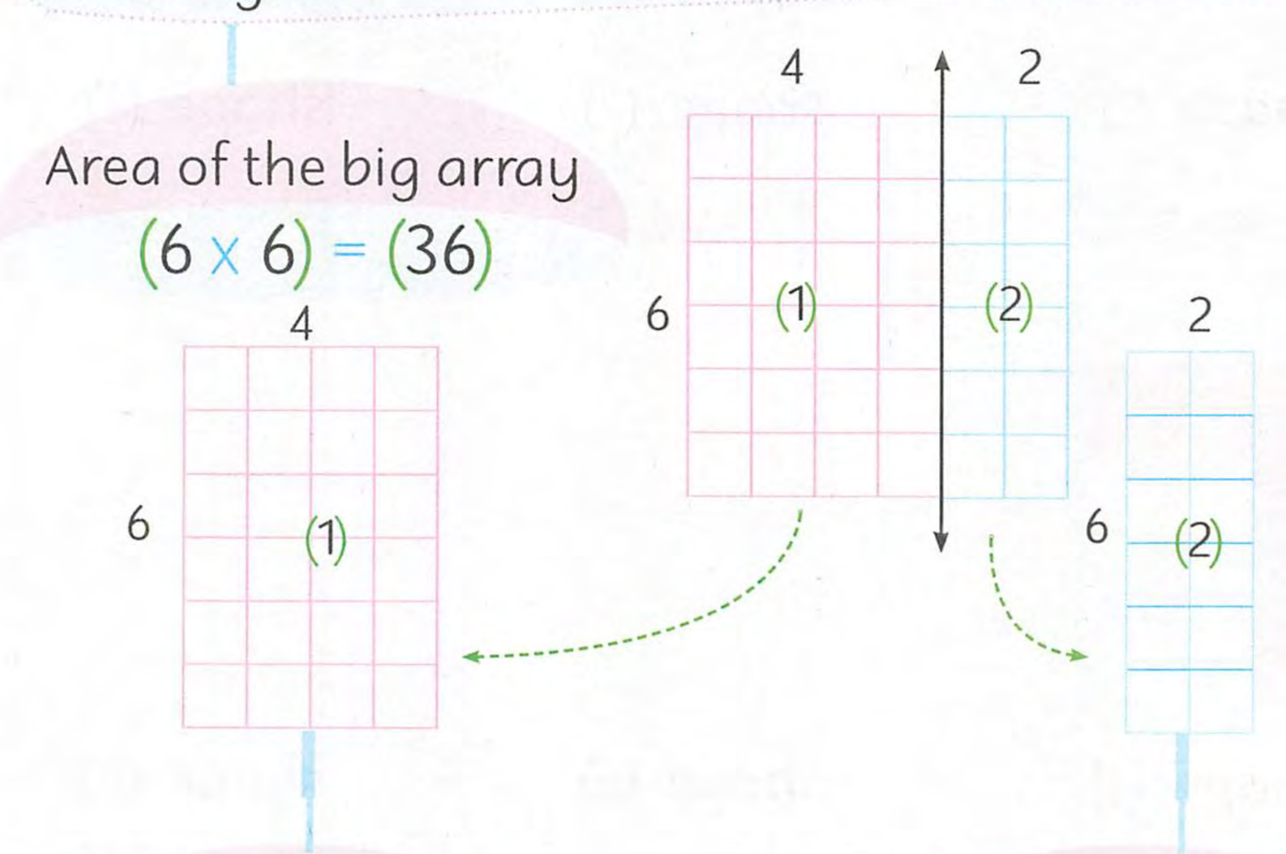
shape (6)

Shape	Area
(1)	____ X ____ = ____
(2)	____ X ____ = ____
(3)	____ X ____ = ____

Shape	Area
(4)	____ X ____ = ____
(5)	____ X ____ = ____
(6)	____ X ____ = ____

Distributive property of multiplication

You have (6 X 6) array as shown, you can divide it into two arrays.



Area of the array (1)
(6 x 4) = 24

Area of the array (2)
(6 x 2) = 12

The total area of the two arrays = 24 + 12 = 36 square units

This is called distributive property.
If it is difficult to find the area of the shape, you can divide it into smaller areas to find its area easily.



- I learnt to find the area of the array using distributive property.



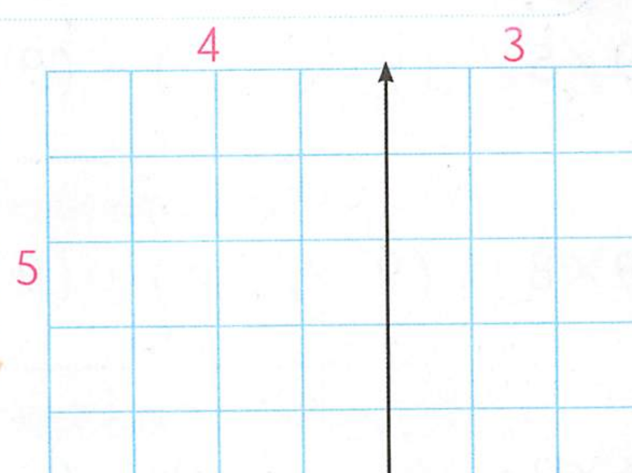
1 Calculate the area of the following arrays using the distributive property:

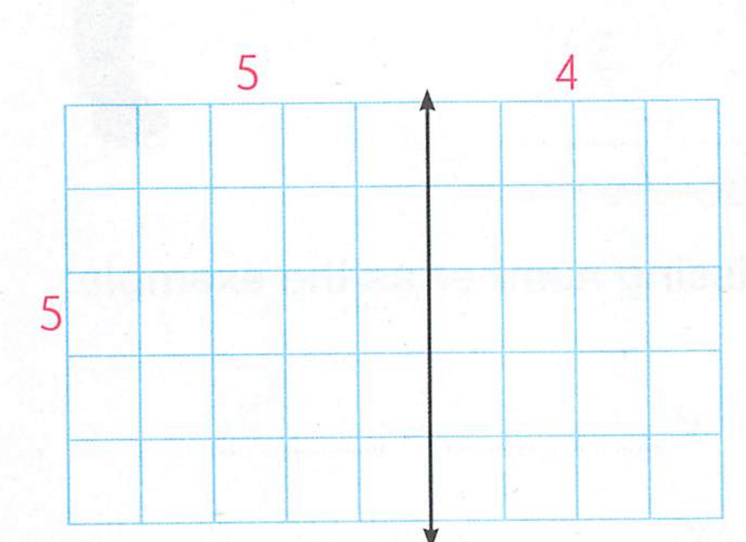
The area of the array =

= (........ X ....) + (........ X ....)

= .... + ... = ... square units

5 X 7 = ...





The area of the array

= (........ X ....) + (........ X ....)

= .... + ...

= .... square units

5 X 9 = ...

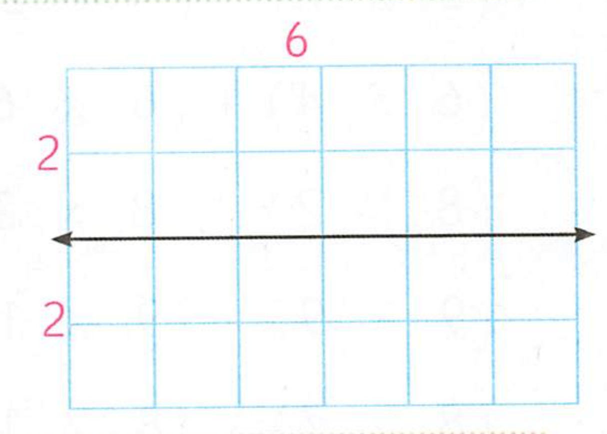
The area of the array

= (........ X ....) + (........ X ....)

= .... + ...

= .... square units

4 X 6 = ...



6 2

3

The area of the array

= (........ X ....) + (........ X ....)

= .... + ...

= .... square units

3 X 8 = ...



2 Find the missing numbers to find the product:



9 × 5 = (9 X ....) + (9 X ....)

= .... + ... = ...

9 × 8 = (9 X ....) + (9 X ....)

= .... + ... = ...

6 × 12 = (........ X 9) + (........ X 3)

= .... + ... = ...

3 Complete by writing the missing number as the example:

(4 X 2) + (4 X 3) = 4 X ....5.... = ...20....

(5 X 7) + (5 X 2) = 5 X .... = ...

(6 X 4) + (6 X 6) = 6 X .... = ...

(8 X 2) + (8 X 3) = 8 X .... = ...

(9 X 9) + (9 X 1) = ... X 10 = ...

(8 X 7) + (8 X 1) = ... X 8 = ...

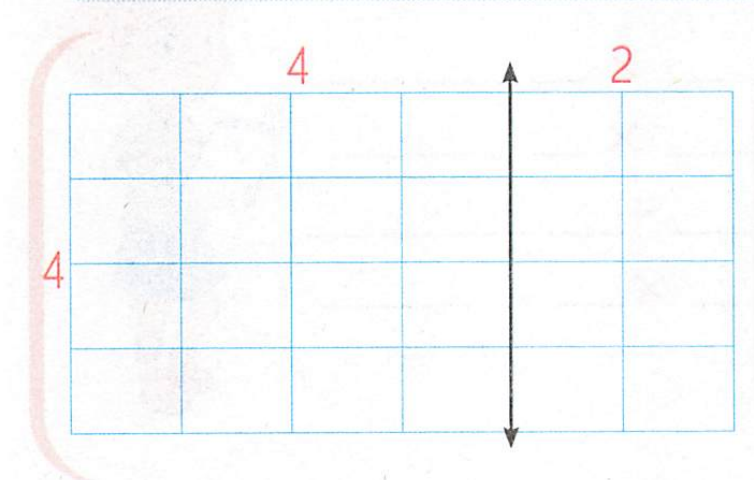
(2 X 2) + (2 X 2) = 2 X .... = ...

(10 X 3) + (10 X 4) = 10 X .... = ...

(6 X 9) + (6 X 1) = ... X 10 = ...



4 Using distributive property, find the multiplication product of the array:

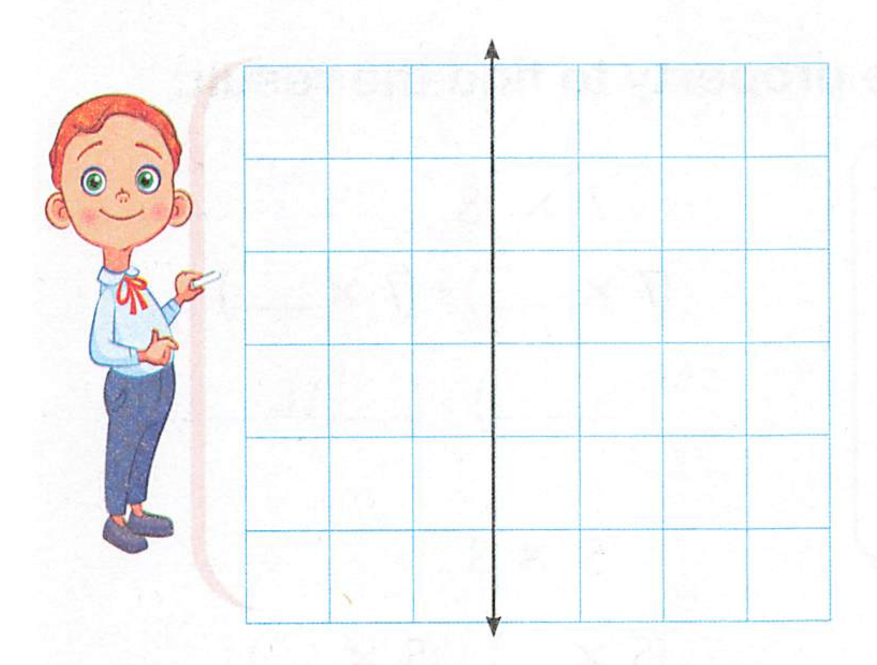


4 X 4 = 16

4 X 2 = 8

16 + 8 = 24

4 X 6 = 24

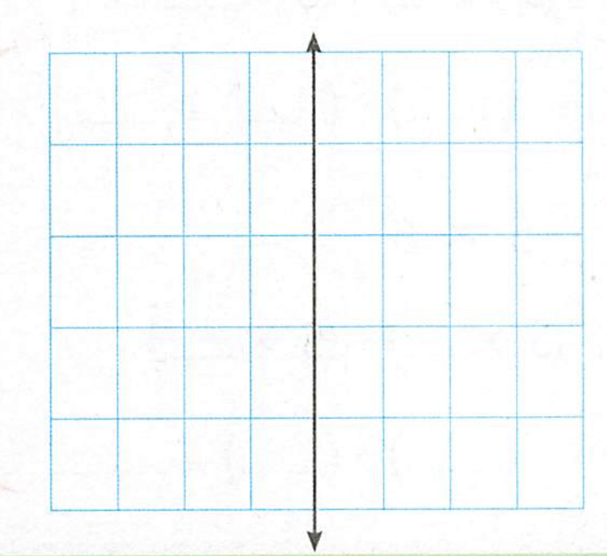


.... X .... = ...

.... X .... = ...

.... + ... = ...

.... X .... = ...



.... X .... = ...

.... X .... = ...

.... + ... = ...

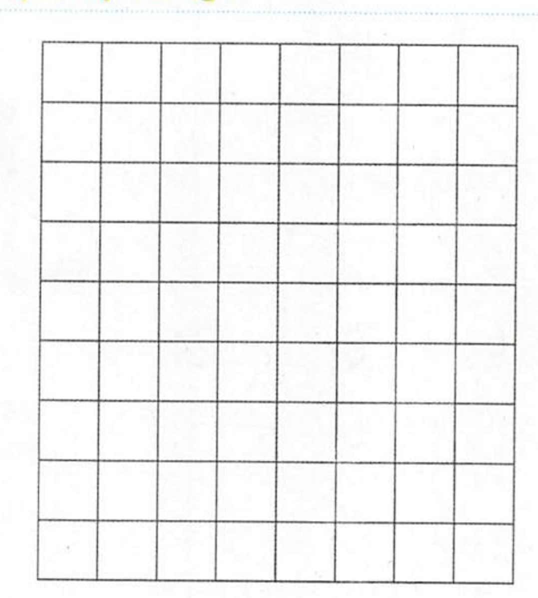
.... X .... = ...

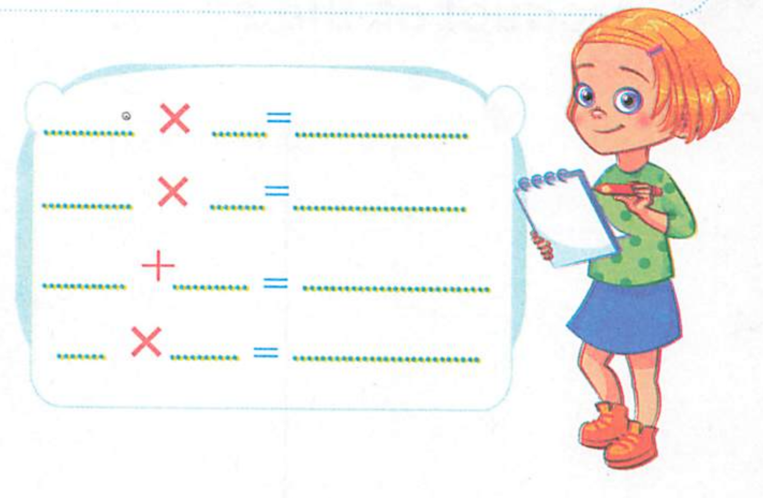




Lessons 38-40

5 Break apart the array according to the distributive property:





6 Use the distributive property to find the result:

2×4

(2 × ....) + (2 × ....)

(..........) + (..........) = ...

7×8

(7 × ....) + (7 × ....)

(..........) + (..........) = ...

4×9

(4 × ....) + (4 × ....)

(..........) + (..........) = ...

5×3

(5 × ....) + (5 × ....)

(..........) + (..........) = ...

3×8

(3 × ....) + (3 × ....)

(..........) + (..........) = ...

5×6

(5 × ....) + (5 × ....)

(..........) + (..........) = ...



7 Find the product using distributive property in two different ways:

3×8

First way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

Second way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

7×5

First way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

Second way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

7×7

First way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

Second way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

7×6

First way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

Second way

(........ × ....) + (........ × ....)

☐ + ☐ = ☐

Review on Chapter Four

1 Write the name of each shape:

....

....

....

....

....

....

....

....

2 Circle the shape as required and write its name:

It has 4 equal sides

Name ....

It has two long equal sides and two short equal sides.

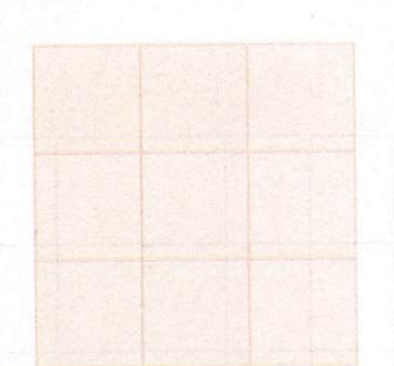
Name ....

It has two parallel unequal sides.

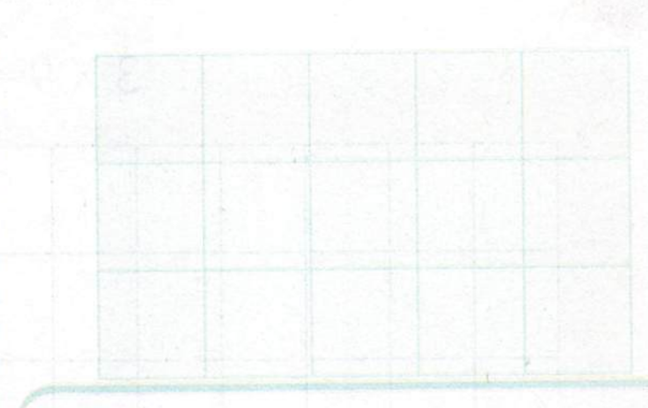
Name ....



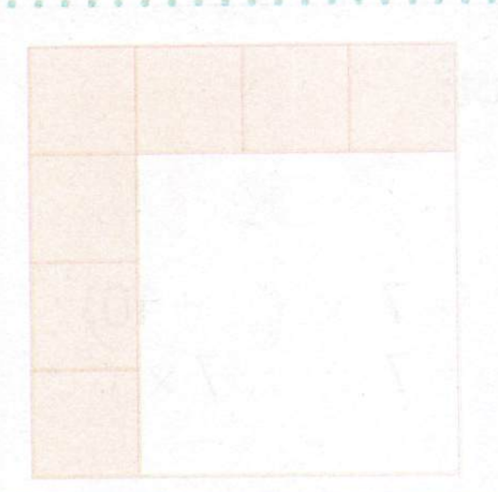
3 Calculate the area of each shape:



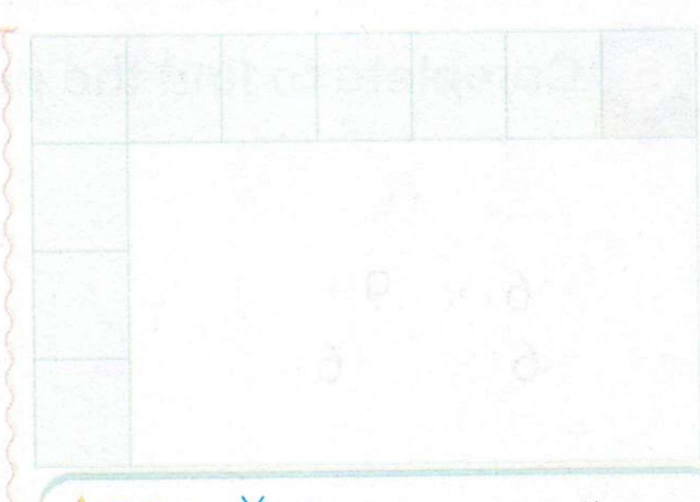
Area = ... X ...... = ... square units



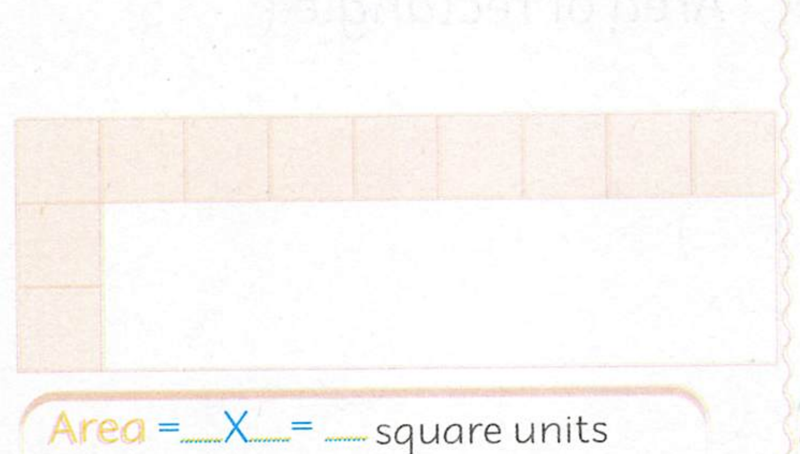
Area = ... X ...... = ... square units



Area = ... X ...... = ... square units



Area = ... X ...... = ... square units



Area = ... X ...... = ... square units

Area = ... X ...... = ... square units

Review



Find the multiplication product of 3 × 9 on the grid:

3 X 9 = ...



Complete to find the product:



= 6 × (9 + ...)
= 6 × .... + 6 × ....
= .... + ... = ...



= 7 × (.... + 10)
= 7 × .... + 7 × ....
= .... + ... = ...



Complete:

Area of rectangle (.... X 6) = Area of rectangle (.... X 5)

(4 + 5) X 10 = (4 X ....) + (5 X ....) = ... + ... = ...

(6 + 3) X 8 = (.... X ....) + (.... X ....) = ... + ... = ...

Chapter Five



- Lessons (41, 42) Perimeter of polygons
- Lesson (43) Estimating the perimeters of polygons in centimeters
- Lessons (44, 45) Perimeter and area
- Lesson (46) Applying a variety of strategies to solve area problems
- Lesson (47) Constructing different rectangles with the same area
- Lesson (48) Constructing different rectangles with the same perimeter
- Lesson (49) Perimeter and area story problems
- Lesson (50) Multiplying by 10 and multiples of 10

Chapter Five Outcomes

Lessons (41 , 42)

- Measure the lengths of sides of polygons in centimeters.
- Define perimeter .
- Calculate the perimeter of polygons in centimeters.
- Explain why perimeter is a linear measurement.
- Distinguish between polygons and non-polygons.
- Describe practical applications for measuring perimeter.

Lesson (43)

- Estimate the perimeters of polygons in cetimeters.
- Measure the lengths of sides of polygons in centimeters.
- Calculate the perimeter of polygons in centimeters.
- Explain how to calculate perimeter of polygons.

Lessons (44 , 45)

- Explain the difference between perimeter and area.
- Calculate the perimeter and area of given arrays with some units missing.
- Explain why area is not a linear measurement.
- Calculate the area of a rectangle given only the length and width.
- Describe the problem solving strategies they used to solve area problems.

Lesson (46)

- Apply a variety of strategies to solve area problems.
- Explain the strategies they used to solve area problems.

Lesson (47)

- Construct different rectangles with the same area.
- Compare the areas of rectangles with the same perimeters but different dimensions.

Lesson (48)

- Construct different rectangles with the same perimeter.
- Compare the areas of rectangles with the same perimeters but different dimensions.

Lesson (49)

- Apply strategies to solve real world and perimeter problems.
- Apply their understanding of area and perimeter to write story problems.

Lesson (50)

- Multiply by 10 and multiples of 10.
- Identify and explain patterns observed when multiplying by 10s.

Chapter (5)
Lessons
(41,42)

Perimeter of polygons

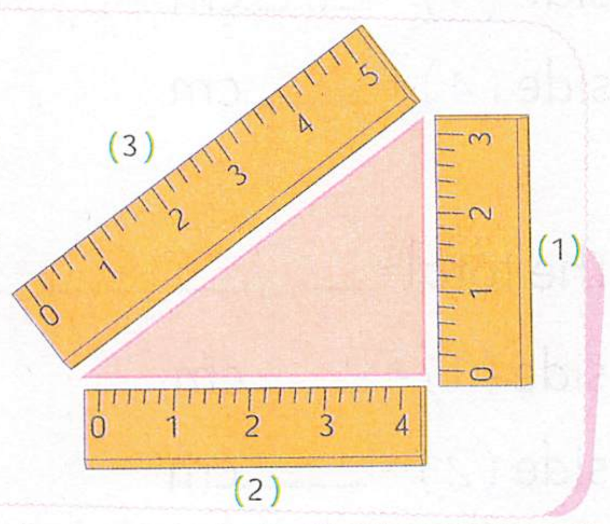
Measure each side. Add to find the total.

The length of side (1) = 3 cm

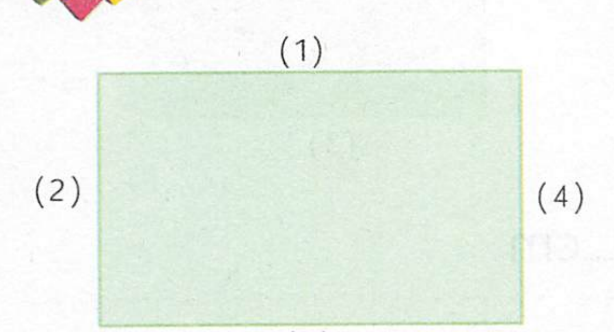
The length of side (2) = 4 cm

The length of side (3) = 5 cm

The total = 3 + 4 + 5 = 12 cm



1 Measure each side and find the total as the previous example:



side (1) = ...cm

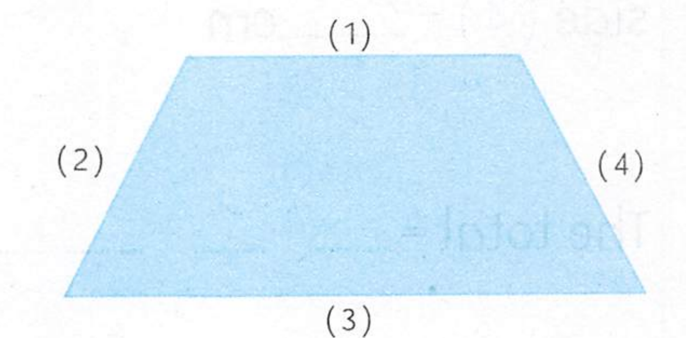
side (2) = ...cm

side (3) = ...cm

side (4) = ...cm

The total=

.... + ... + ... + ... = ...cm



side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

side (4) = ...cm

The total=

.... + ... + ... + ... = ...cm

I learnt to measure side lengths of a polygon and find their total.

Lessons 41 , 42



2 **Find the total length of all sides of the following shapes:**

side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

side (4) = ...cm

(1)

(2) (4)

(3)

The total= .... + ... + ... + ... = ...cm

side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

side (4) = ...cm



The total = ... + ... + ... + ... = ...cm

(1)

side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

side (4) = ...cm

(4)

(2)

(3)

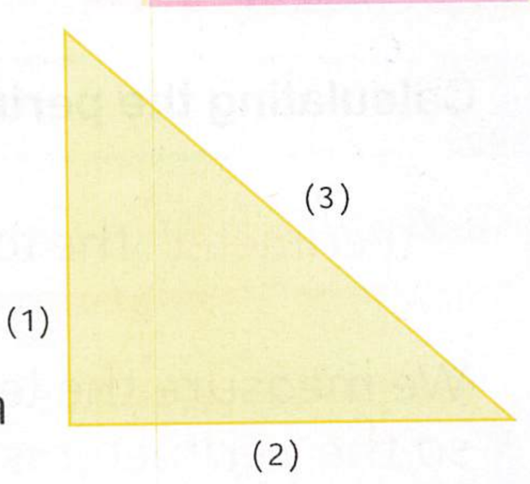
The total = ... + ... + ... + ... = ...cm

side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

The total = ... + ... + ... = ...cm



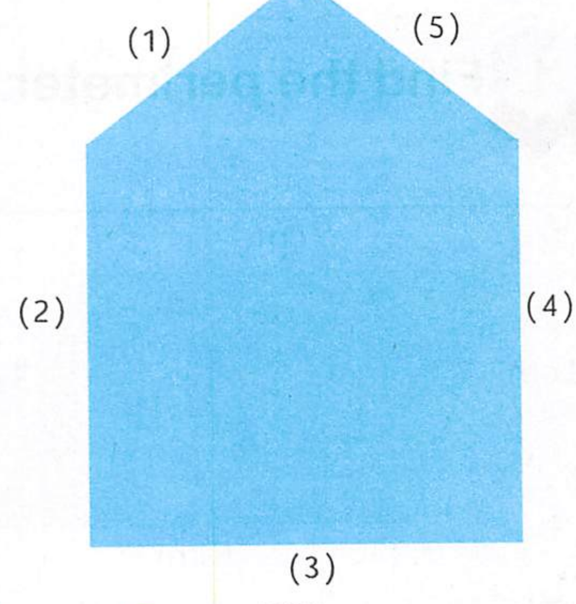
side (1) = ...cm

side (2) = ...cm

side (3) = ...cm

side (4) = ...cm

side (5) = ...cm



The total = ... + ... + ... + ... + ... = ...cm



Note: The total length of all sides of a polygon is called (perimeter)

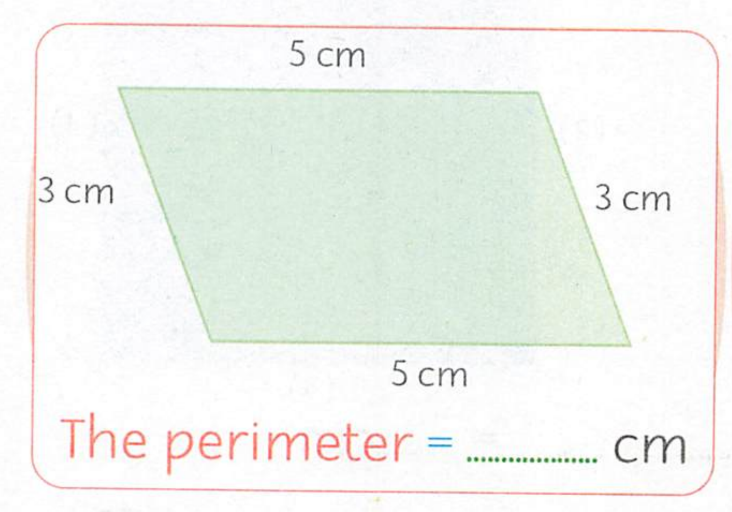


Calculating the perimeters of polygons in centimeters

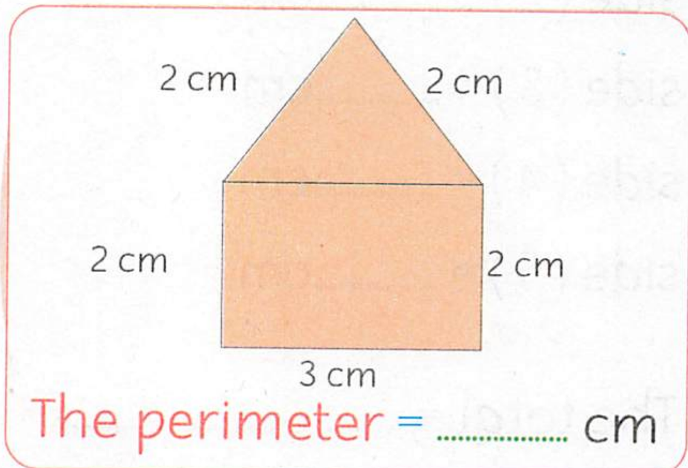
Perimeter : the total length of all sides of a polygon

We measure the length of each side
so the perimeter is a linear measurement
because it determines the length of the outside
line of the polygon .

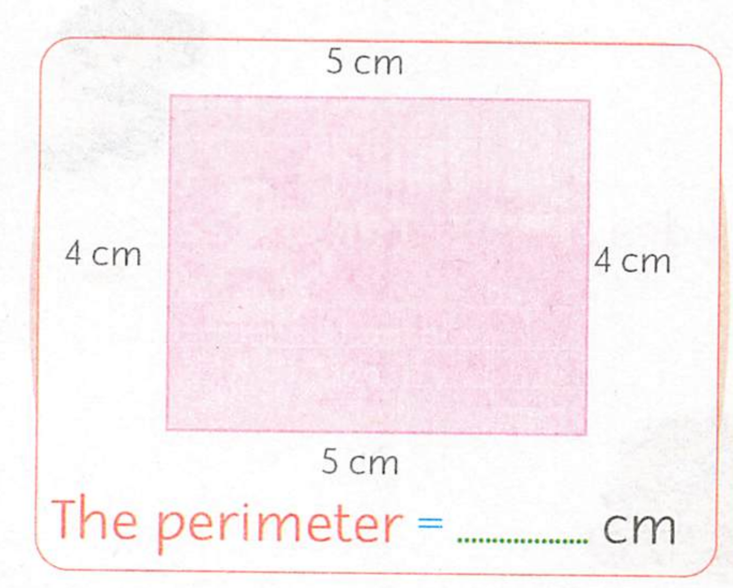
1 Find the perimeter.



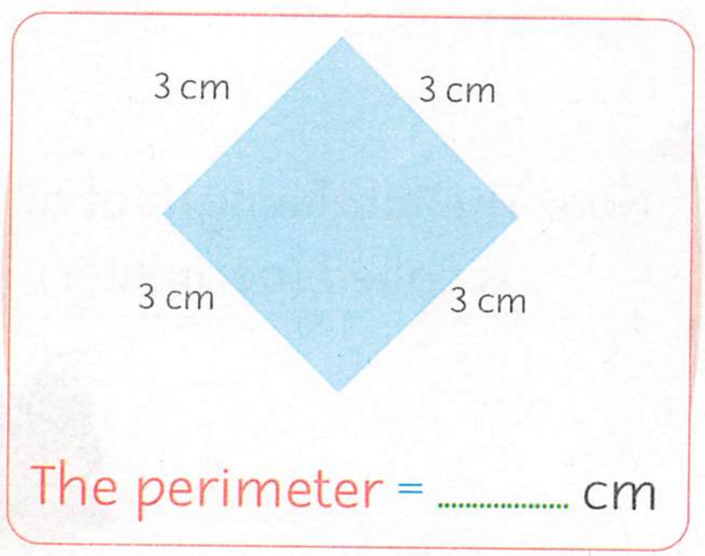
The perimeter = ... cm



The perimeter = ... cm



The perimeter = ... cm



The perimeter = ... cm



I can calculate the perimeter of a polygon by knowing the lengths of its sides.

7 cm

7 cm 7 cm

7 cm

The perimeter =

.... + ... + ... + ... = ... cm

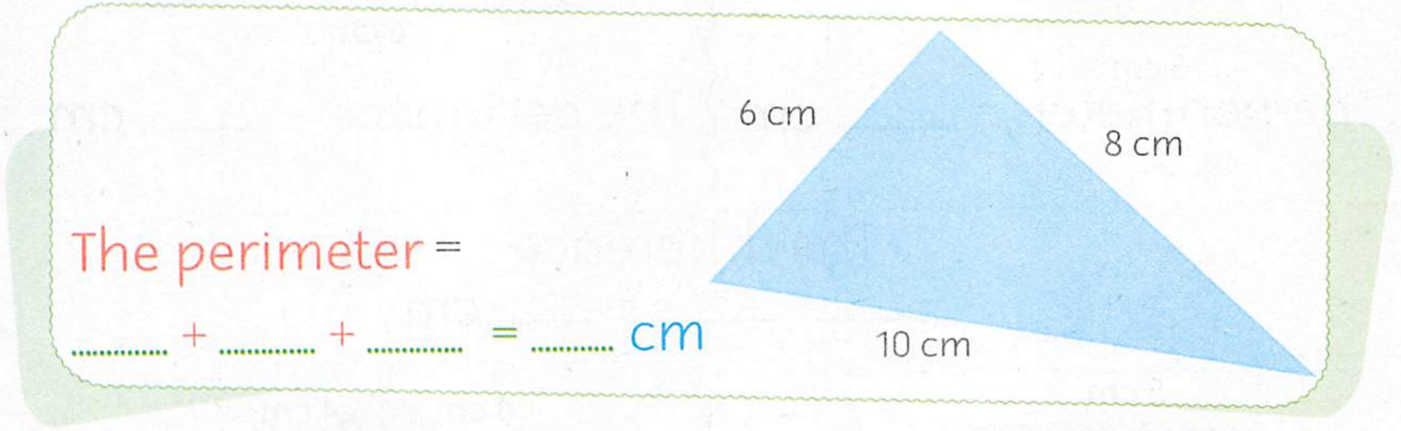
6 cm

3 cm 3 cm

8 cm

The perimeter =

.... + ... + ... + ... = ... cm



The perimeter =

.... + ... + ... = ... cm

8 cm

5 cm 5 cm

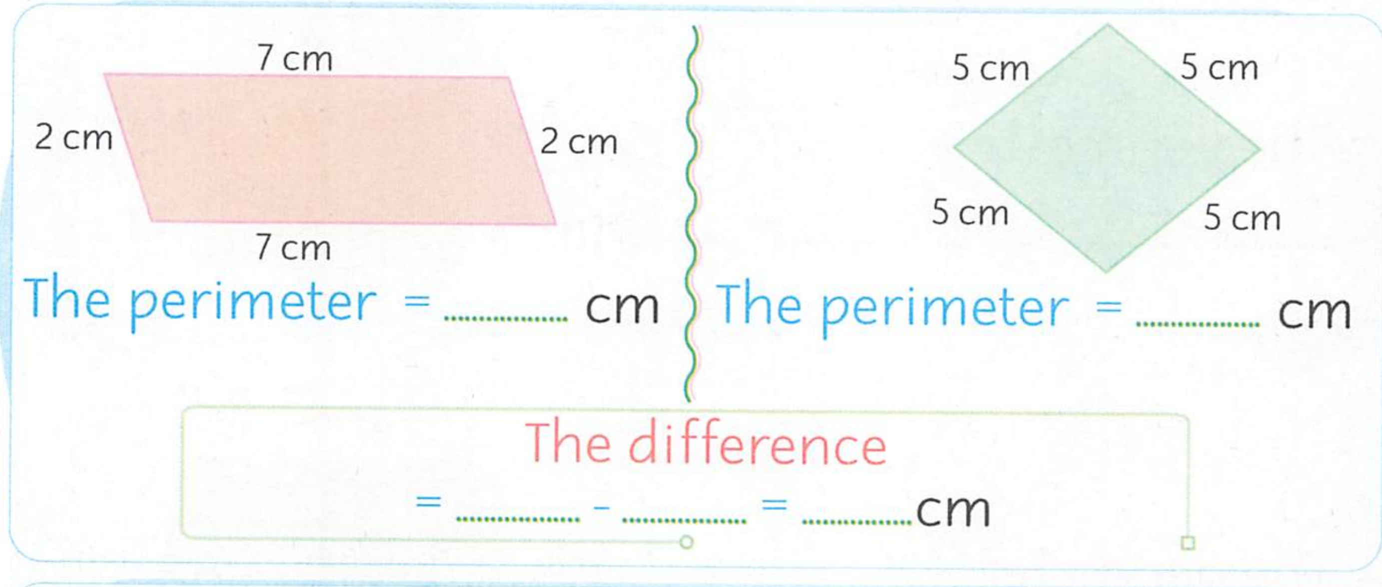
8 cm

The perimeter =

.... + ... + ... + ... = ... cm



2 Find the difference between the perimeters of the two shapes:

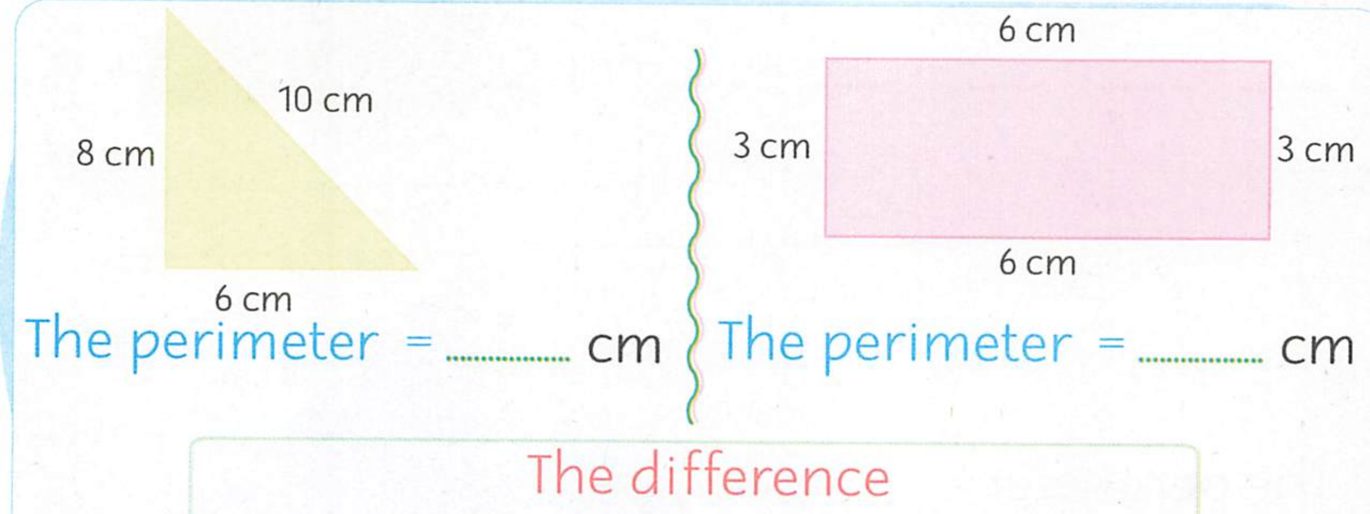


The perimeter = ... cm

The perimeter = ... cm

The difference

= .... - .... = ...cm

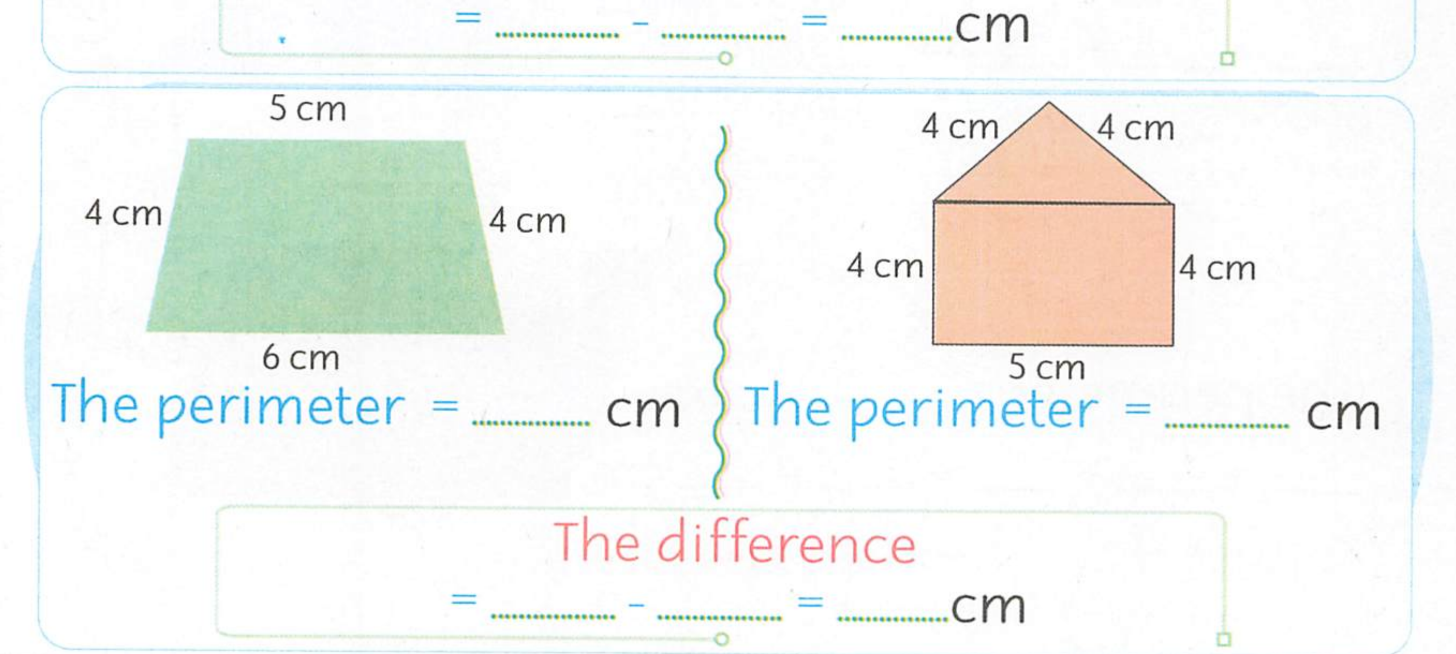


The perimeter = ... cm

The perimeter = ... cm

The difference

= .... - .... = ...cm



The perimeter = ... cm

The perimeter = ... cm

The difference

= .... - .... = ...cm

Estimating the perimeters of polygons in centimeters (cm)

To estimate the perimeter of any polygon we estimate the total lengths of its sides through guessing



1 Estimate the perimeter of the following polygons:

Estimated perimeter= .... cm
Actual perimeter = ... cm

Estimated perimeter= .... cm
Actual perimeter = ... cm

Estimated perimeter= .... cm
Actual perimeter = ... cm

Estimated perimeter= .... cm
Actual perimeter = ... cm

Estimated perimeter= .... cm
Actual perimeter = ... cm

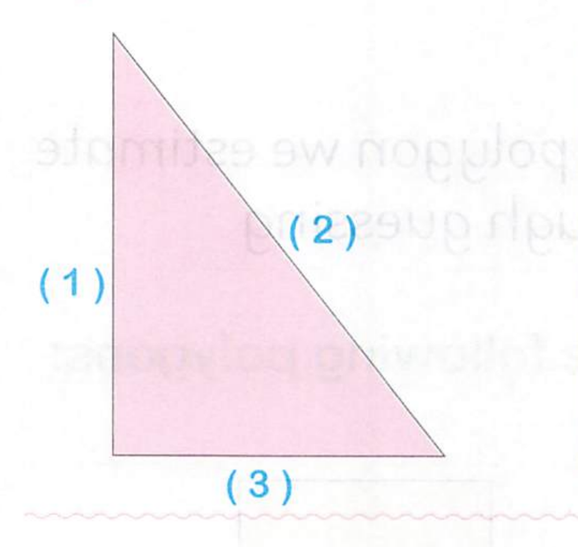
Estimated perimeter= .... cm
Actual perimeter = ... cm

I learnt to estimate the perimeter of two-dimensional shapes.

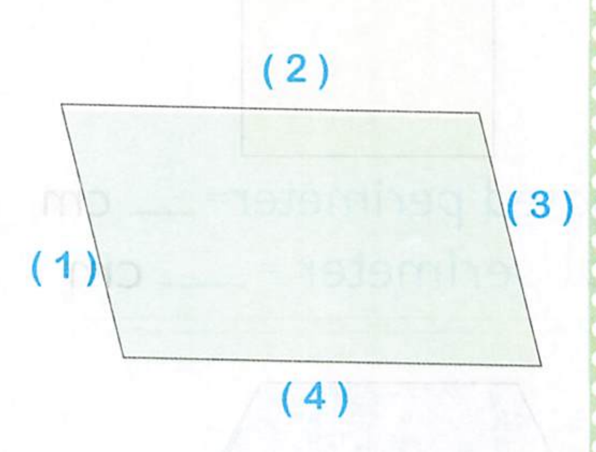


Lesson 43

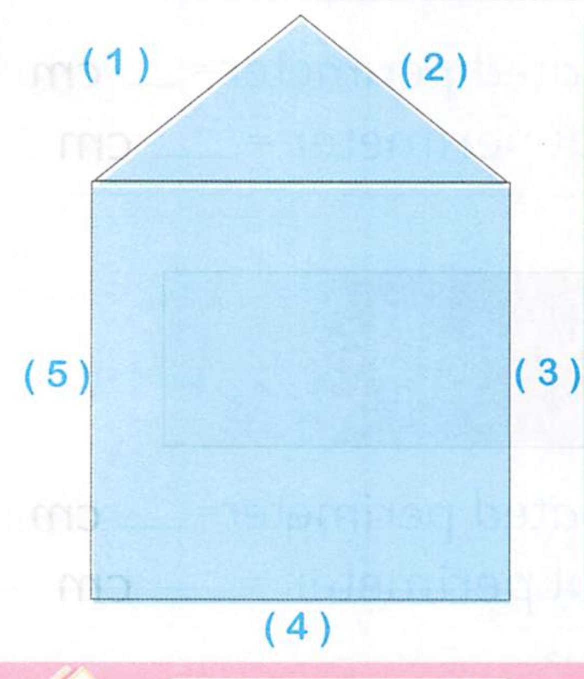
2 Complete the table:



Triangle	
Side	The length
(1)	.... cm
(2)	.... cm
(3)	.... cm
perimeter	.... cm



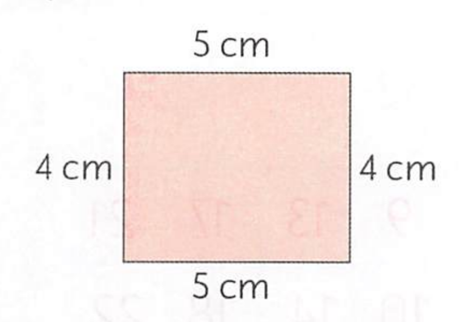
Parallelogram	
Side	The length
(1)	.... cm
(2)	.... cm
(3)	.... cm
(4)	.... cm
perimeter	.... cm



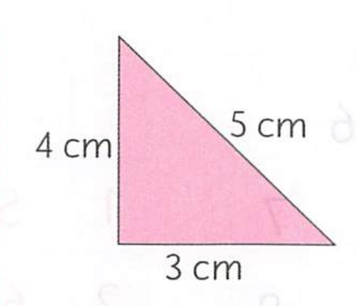
Pentagon	
Side	The length
(1)	.... cm
(2)	.... cm
(3)	.... cm
(4)	.... cm
(5)	.... cm
perimeter	.... cm



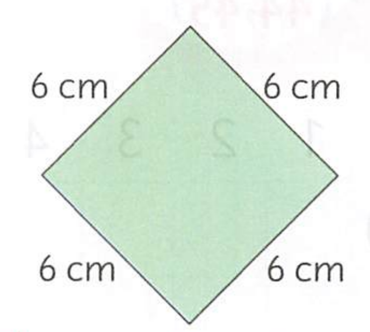
3 Find the perimeter, then arrange ascendingly:



The perimeter = ... cm

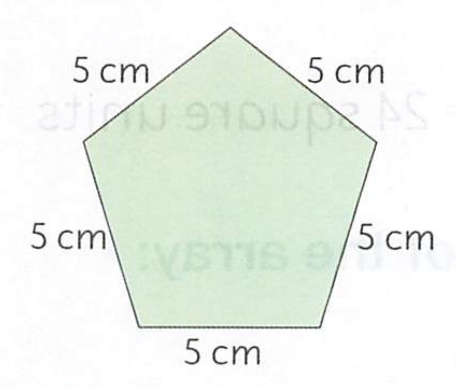


The perimeter = ... cm



The perimeter = ... cm

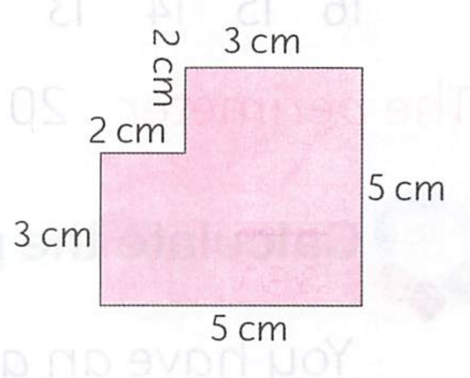
The order is : .... , ... , ...



The perimeter = ... cm

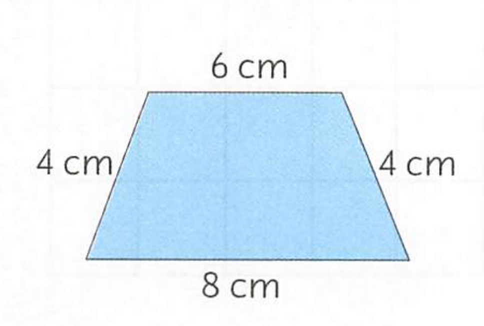
3 cm
2 cm
2 cm
2 cm
2 cm
3 cm
3 cm
7 cm

The perimeter = ... cm

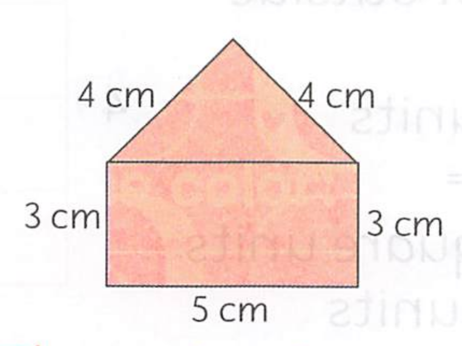


The perimeter = ... cm

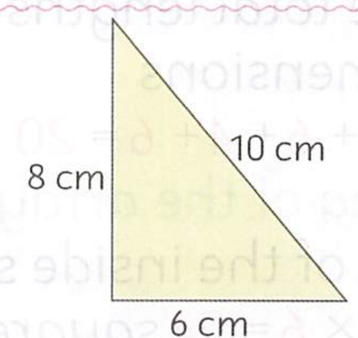
The order is : .... , ... , ...



The perimeter = ... cm



The perimeter = ... cm



The perimeter = ... cm

The order is : .... , ... , ...

Chapter (5) Lessons (44,45)

Perimeter and area

	1	2	3	4	5	6	
20							7
19							8
18							9
17							10
	16	15	14	13	12	11	

1	5	9	13	17	21
2	6	10	14	18	22
3	7	11	15	19	23
4	8	12	16	20	24

The perimeter = 20 units

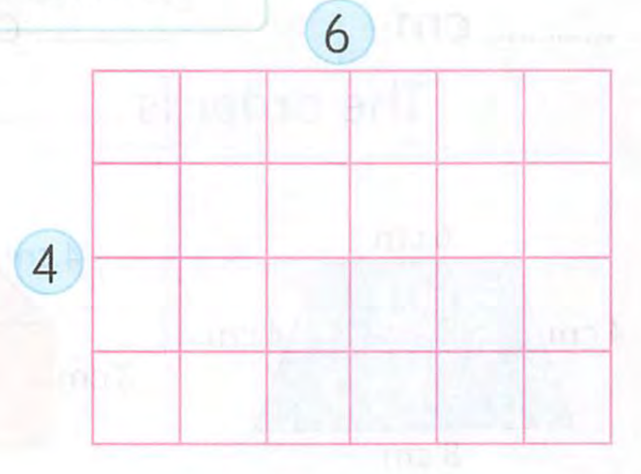


Area = 24 square units



Calculate the perimeter and area of the array:

You have an array 4×6 which consists of 4 rows and 6 columns



Perimeter of the array =
The total lengths of outside dimensions
$= 4 + 6 + 4 + 6 = 20$ units

Area of the array =
No. of the inside square units
$= 4 \times 6 = 24$ square units

The unit of the perimeter is a linear unit.

The unit of the area is a square unit.

I learnt to calculate the perimeter and area through the array dimensions.

You have an array with 4 rows and 3 columns



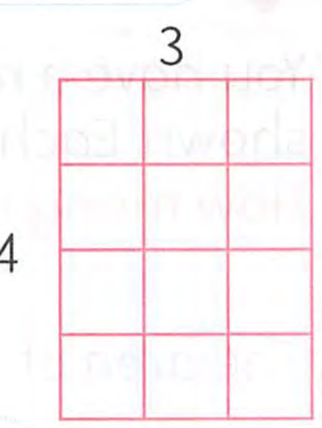
Solution

The perimeter of the array =

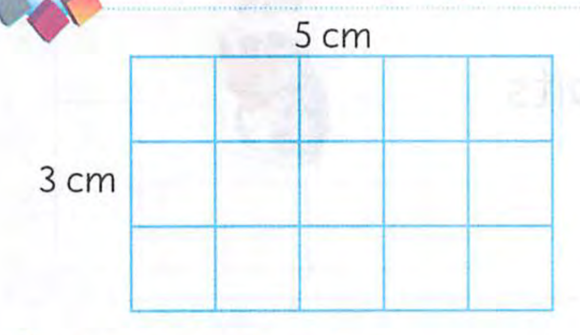
$4 + 3 + 4 + 3 = 14$ units

The area of the array =

$4 \times 3 = 12$ square units



1 Calculate the perimeter and the area:



The perimeter = ... cm

The area= ....square cm

7 cm

1 cm

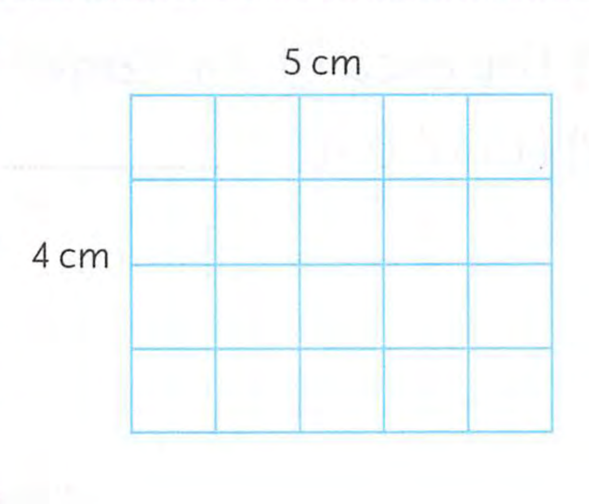
The perimeter = ... cm

The area= ....square cm



The perimeter = ... cm

The area= ....square cm



The perimeter = ... cm

The area= ....square cm



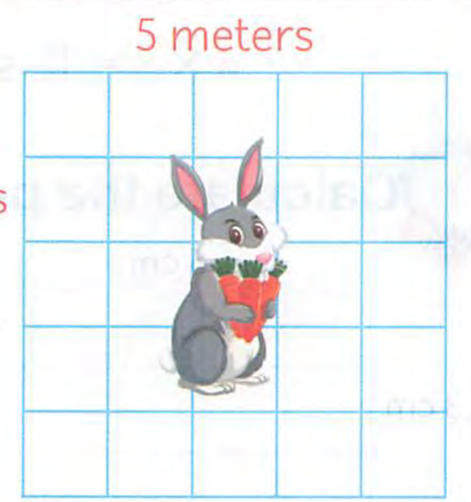
2 Solve the following story problems:

You have a rabbit pen in the form of an array as shown. Each rabbit needs 1 square meter in the pen.
How many rabbits are there in the pen ?

The area of the pen = ... × ....

= .... square meters

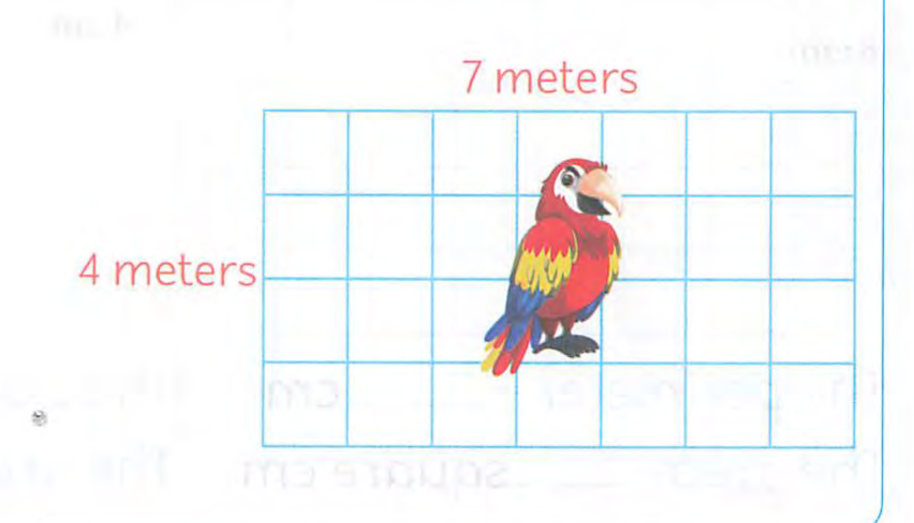
No. of rabbits = ... rabbits



You have a cage of parrots.
The cage is in the form of an array .
Each bird needs 1 square meter . Find:

(1) The area of the cage = ... square meters

(2) No. of birds = ... birds





3 Answer the following questions:

A rectangle with 9cm long and 3cm wide
Calculate : (1) The area of the rectangle
(2) The perimeter of the rectangle

9 cm
3 cm

Area = ... × .... = ... square cm
Perimeter = ... + ... + ... + ... = ... cm

A rectangle with 8m long and 5m wide
Calculate : (1) The area of the rectangle
(2) The perimeter of the rectangle

8 m
5 m

Area = ... × .... = ... square meters
Perimeter = ... + ... + ... + ...=............meters

A rectangle with 6m long and 3m wide
Calculate : (1) The area of the rectangle
(2) The perimeter of the rectangle

6 m
3 m

Area = ... × .... = ... square meters
Perimeter = ... + ... + ... + ...=............meters

Can we put a group of animals inside it that needs an area of 17 square meters ? ....

Lessons 44 , 45



4 You have a pen as shown on the figure. You have a group of animals with area of each pen. Find:

6 meters

6 meters

The area =

.... × .... = ... square meters

The perimeter =

.... + ... + ... + ... = ... meters



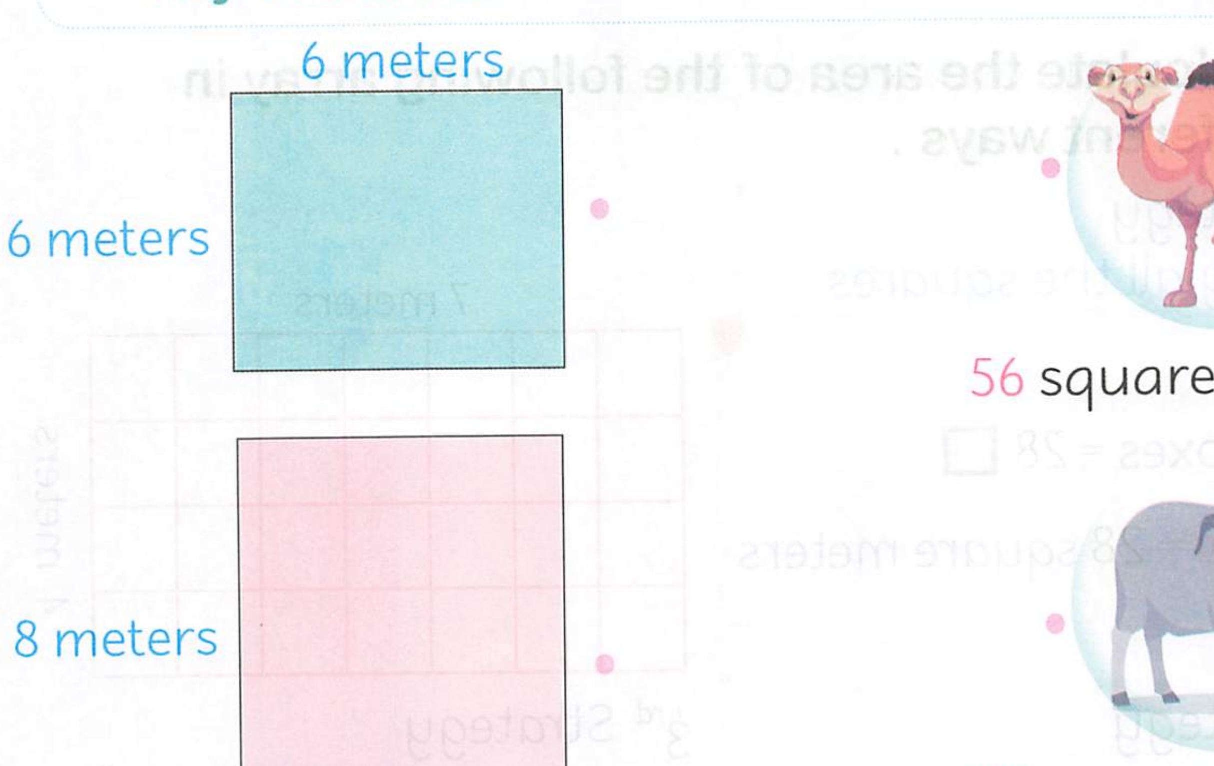
What are the animals that suit the pen area ?

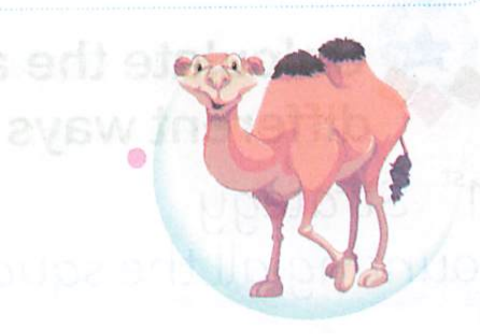
....

What are the animals that don't suit the pen area ?

....

5 **You have some pens with their dimensions. A group of animals with the area of the pen where they live. Match each animal to the suitable pen:**

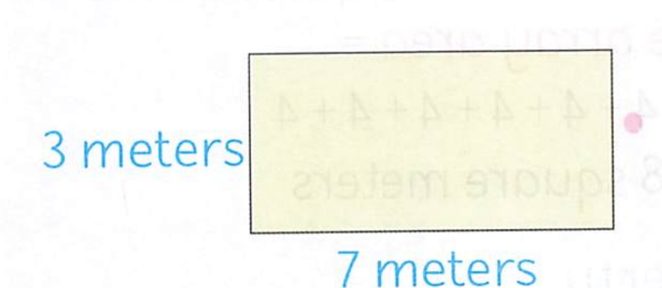




56 square meters

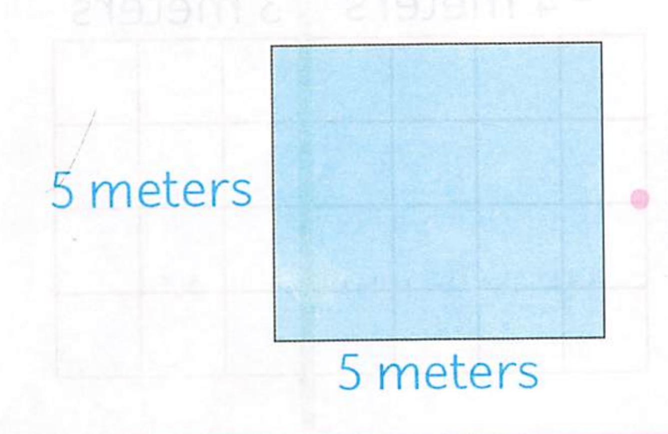


25 square meters





36 square meters





21 square meters

Chapter (5) Lesson (46)

Applying a variety of strategies to solve area problems



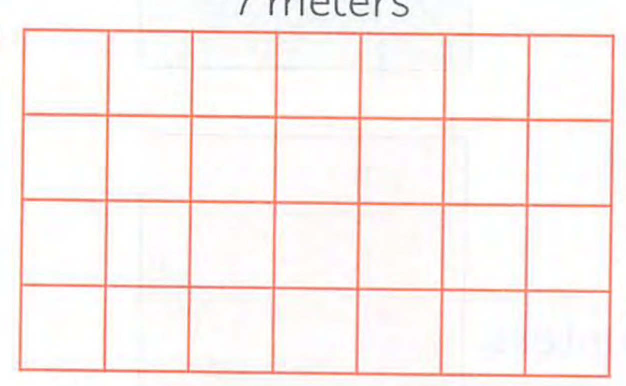
Calculate the area of the following array in different ways .

1^{st} Strategy

Counting all the squares

No. of boxes = 28 □

The area = 28 square meters



2^{nd} Strategy

Multiplication

The array area =

$4 \times 7 = 28$ square meters

3^{rd} Strategy

Repeated addition

The array area =

$7 + 7 + 7 + 7 = 28$ square meters

The array area =

$4 + 4 + 4 + 4 + 4 + 4 + 4$

$= 28$ square meters

4^{th} Strategy Distributive property

The array area $= 4 \times 7$

$= 4 \times (4 + 3)$

$= (4 \times 4) + (4 \times 3)$

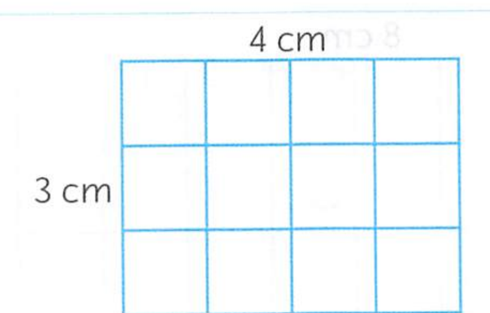
$= 16 + 12 = 28$ square meters



I learnt strategies of calculating the area of the array .

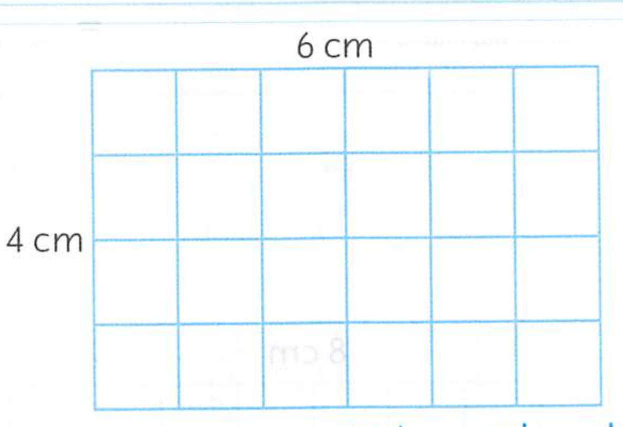


Get the area of the arrays in two different methods:



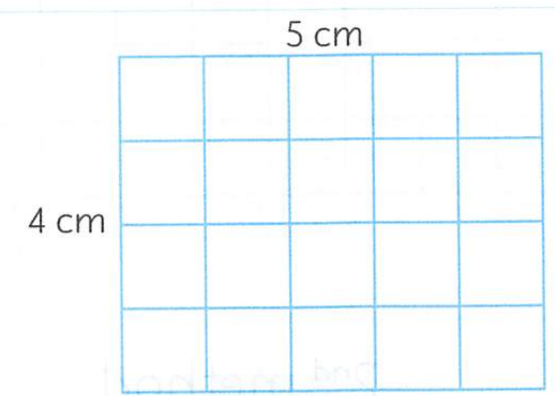
1st method :
The area = ...
= ....

2nd method :
The area = ...
= ....



1st method :
The area = ...
= ....

2nd method :
The area = ...
= ....



1st method :
The area = ...
= ....

2nd method :
The area = ...
= ....

8 cm

3 cm

1st method :

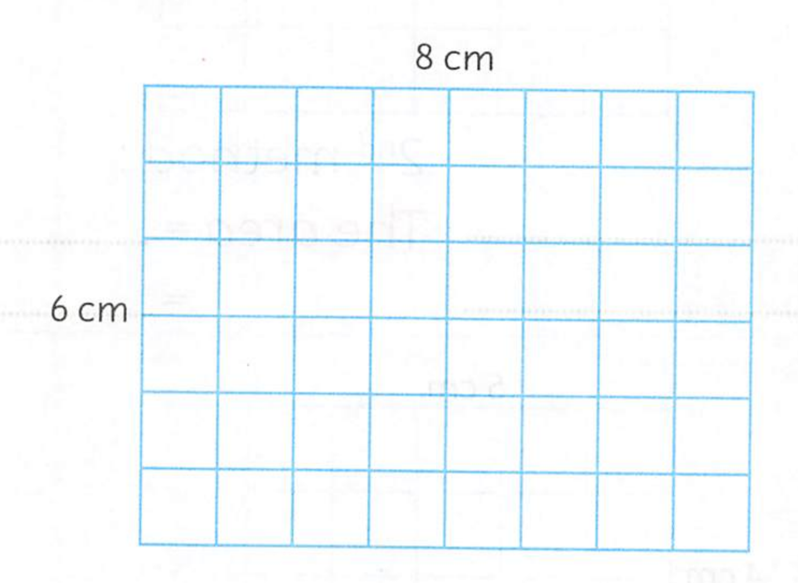
The area = ...

= ....

2nd method :

The area = ...

= ....



1st method :

The area = ...

= ....

2nd method :

The area = ...

= ....



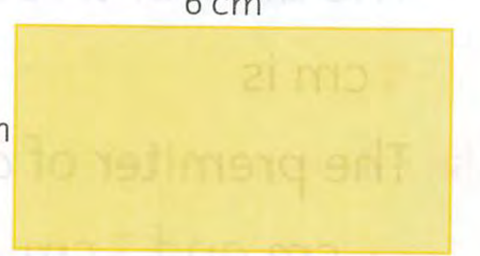
2 Choose the correct answer:

1. The area of a rectangle whose dimensions are 8 cm, 4 cm is (12 cm - 24 cm - 32 square cm)
2. The premiter of a rectangle whose dimensions are 6 cm and 3 cm is (9 cm - 18 square cm - 18 cm)
3. You have an array as shown on the figure. The number of columns are .... columns (6 - 5 - 18)
4. To calculate an array area, we must know number of (columns only - rows only - both of them)
5. The area of a rectangle whose dimensions are 7 cm and 3 cm is (21 square cm - 12 square cm - 20 square cm)
6. The area of a rectangle whose dimensions are 8 cm and 5 cm is (40 square cm - 13 square cm - 26 square cm)
7. The area of a land with dimensions of 10 m and 7 m is (17 square meters - 34 meters - 70 square meters)
8. The area of a poultry pen with dimensions of 9 meters and 7 meters is (63 square meters - 32 square meters - 23 meters)

Constructing different rectangles with the same area

Chapter (5)
Lesson (47)

You have a rectangle with dimensions as shown in the shape :



The area = $4 \times 6 = 24$ square cm

You can draw different rectangles with the same area but different perimeter .

The following ways show that on (the grid)

$4 \times 6 = 24$

Perimeter = 20 cm

$3 \times 8 = 24$

Perimeter = 22 cm

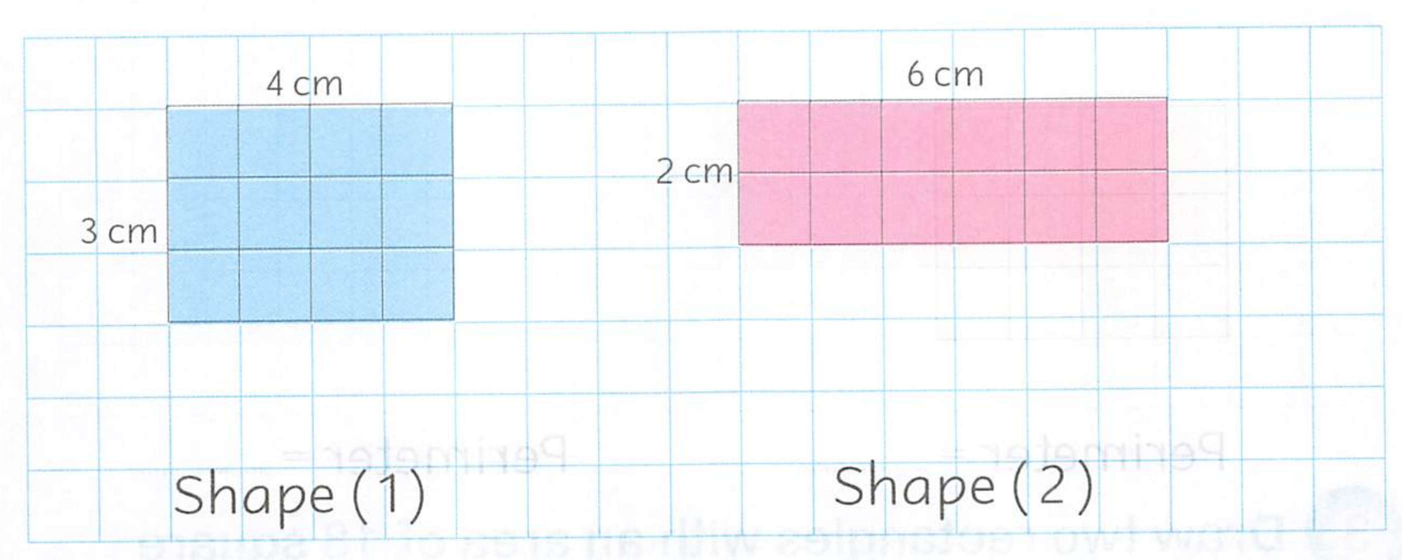
$2 \times 12 = 24$

Perimeter = 28 cm

I learnt to construct different rectangles with the same area, but different perimeter .



1 Compare the area and perimeter of the two rectangles:



Area = ... square cm

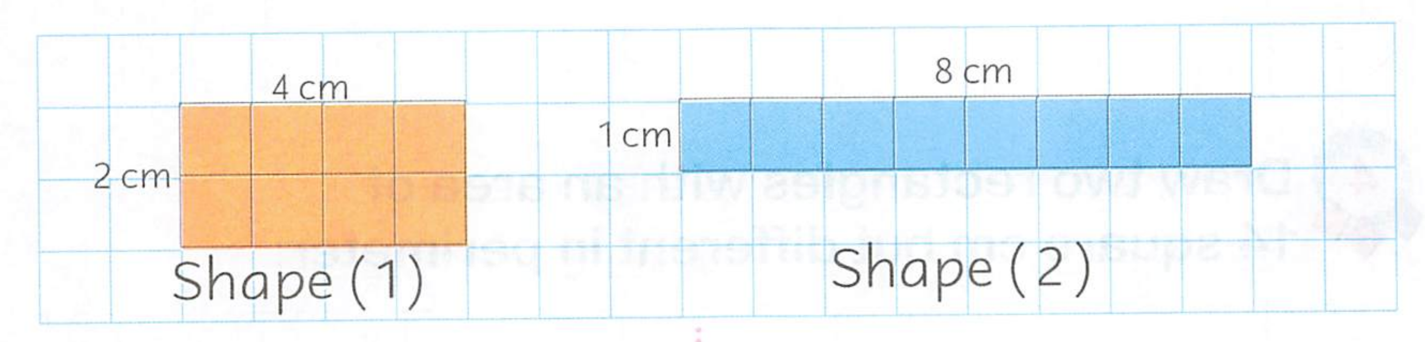
Perimeter = ... cm

Area = ... square cm

Perimeter = ... cm

Area of shape (1) (>, <, =) area of shape (2)

Perimeter of shape (1) (>, <, =) perimeter of shape (2)



Area = ... square cm

Perimeter = ... cm

Area = ... square cm

Perimeter = ... cm

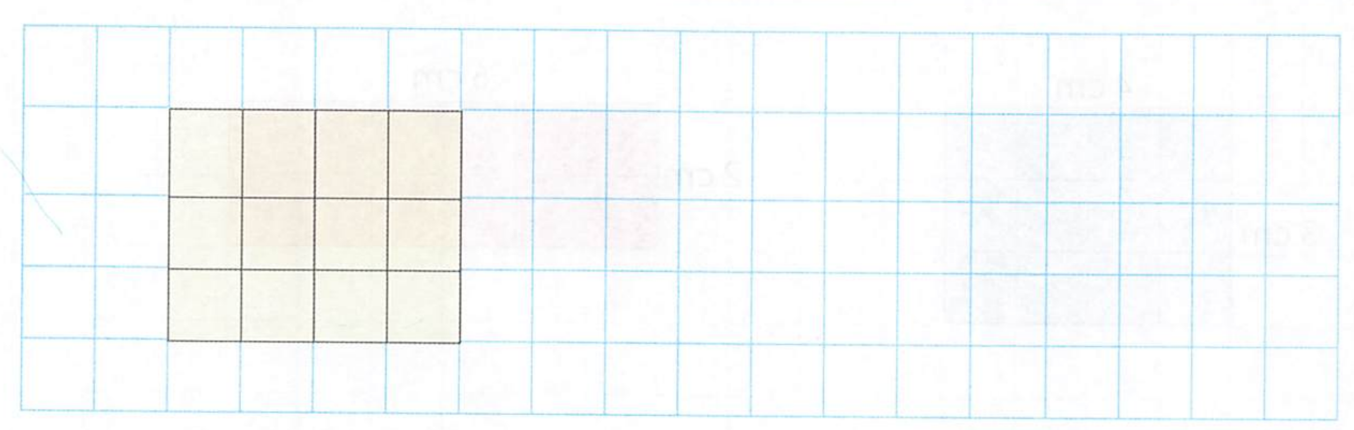
Area of shape (1) (>, <, =) area of shape (2)

Perimeter of shape (1) (>, <, =) perimeter of shape (2)

Lesson 47



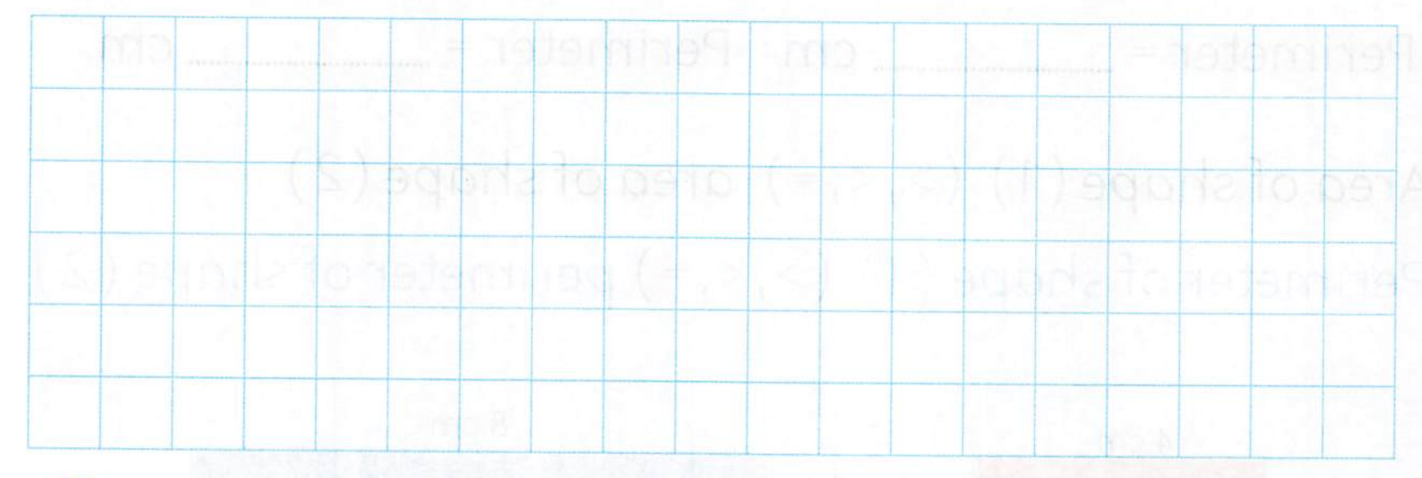
2 Draw a rectangle with the same area and different perimeter:



Perimeter = ...   Perimeter = ...



3 Draw two rectangles with an area of 18 square units but different in perimeter:

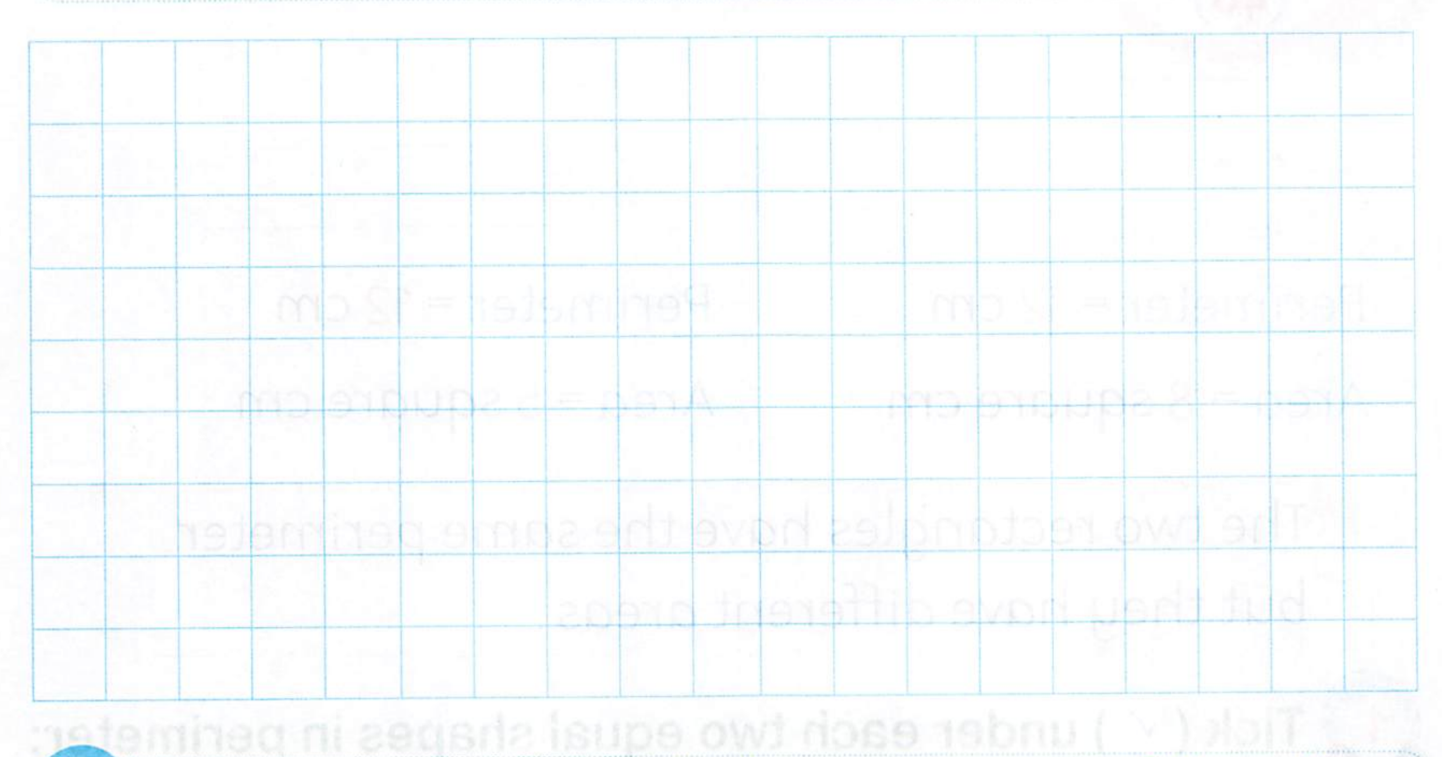


4 Draw two rectangles with an area of 14 square cm but different in perimeter:





5 Draw two rectangles with an area of 20 square cm but different in perimeter:





6 Draw a rectangle with the same area of the given one but with different dimensions:

Chapter (5) Lesson (48)

Constructing different rectangles with the same perimeter



Perimeter = 12 cm

Area = 8 square cm

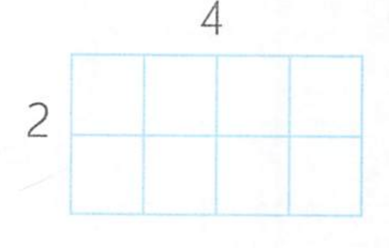


Perimeter = 12 cm

Area = 5 square cm

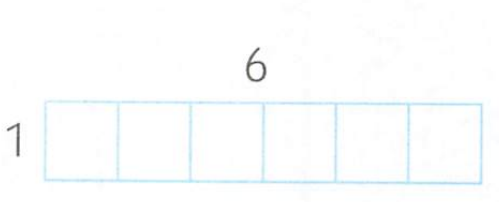
The two rectangles have the same perimeter but they have different areas.

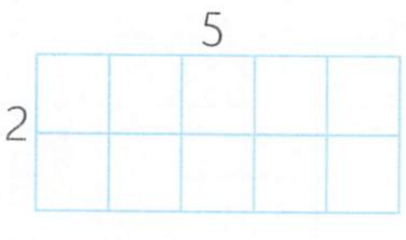
1 Tick (✓) under each two equal shapes in perimeter:

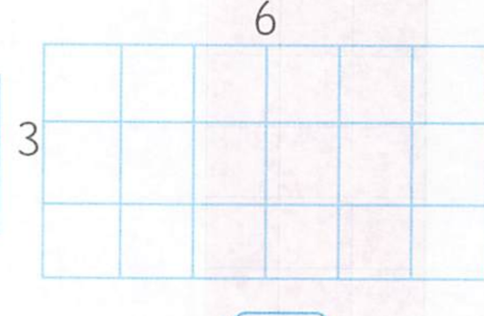


3
2

3
3

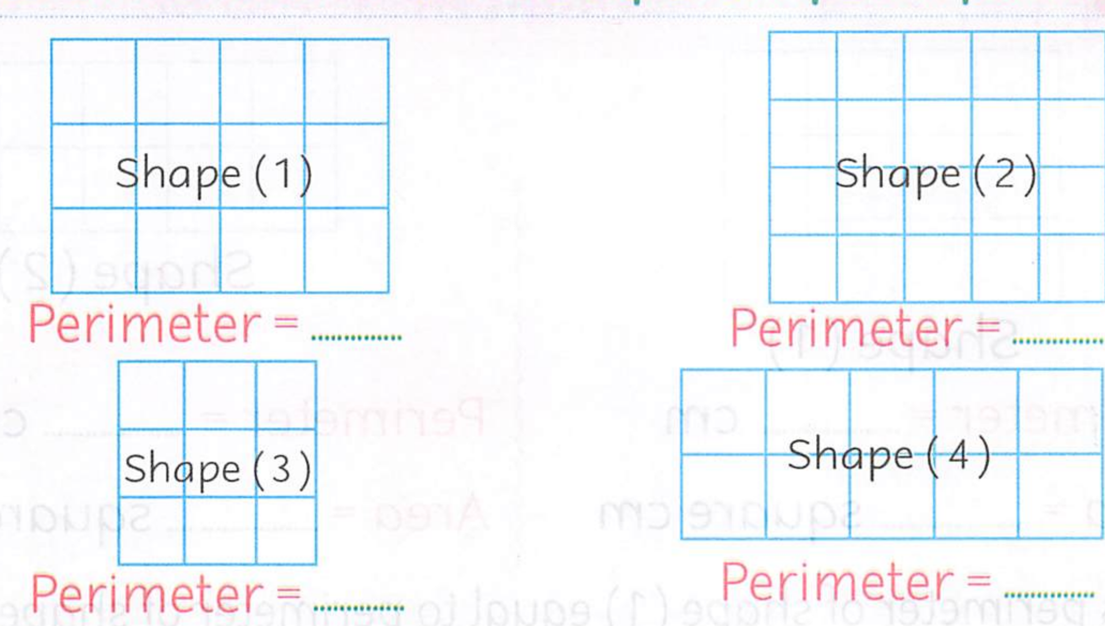








2 Write the number of the two equal shapes in perimeter.



Perimeter = ... Perimeter = ...

Perimeter = ... Perimeter = ...

Perimeter of shape (.........) = perimeter of shape (.........)



3 If you have 10 square units, draw a rectangle, then calculate its perimeter:



4 Draw a rectangle with the same perimeter of the given one:

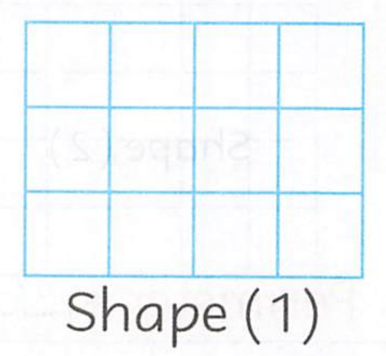
6 cm

3 cm

I learnt to construct rectangles with the same perimeter but different area.



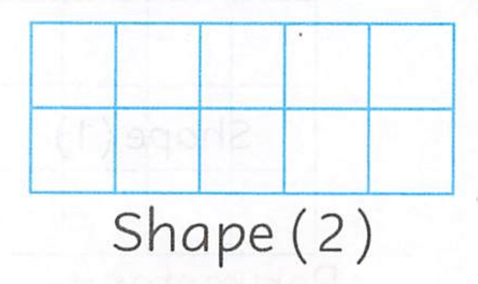
5 Calculate the perimeter and area of the two polygons:



Shape (1)

Perimeter = ... cm

Area = ... square cm



Shape (2)

Perimeter = ... cm

Area = ... square cm

(1) Is perimeter of shape (1) equal to perimeter of shape (2)? ....

(2) Is area of shape (1) equal to area of shape (2)? ....

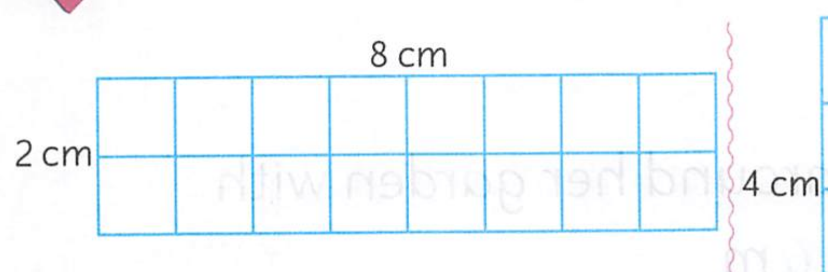
(3) The two shapes are equal in .... but different in ....



6 Show by drawing how you can construct two rectangles equal in perimeter but different in area:



7 Calculate the perimeter and area of the two rectangles:



6 cm

4 cm

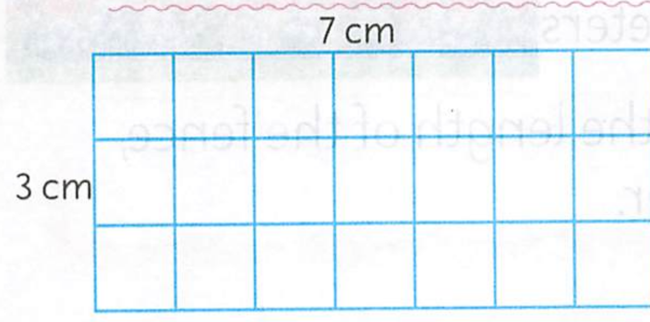
Perimeter = ... cm

Area = ... square cm

Perimeter = ... cm

Area = ... square cm

The two rectangles are equal in .... but different in ....



8 cm

2 cm

Perimeter = ... cm

Area = ... square cm

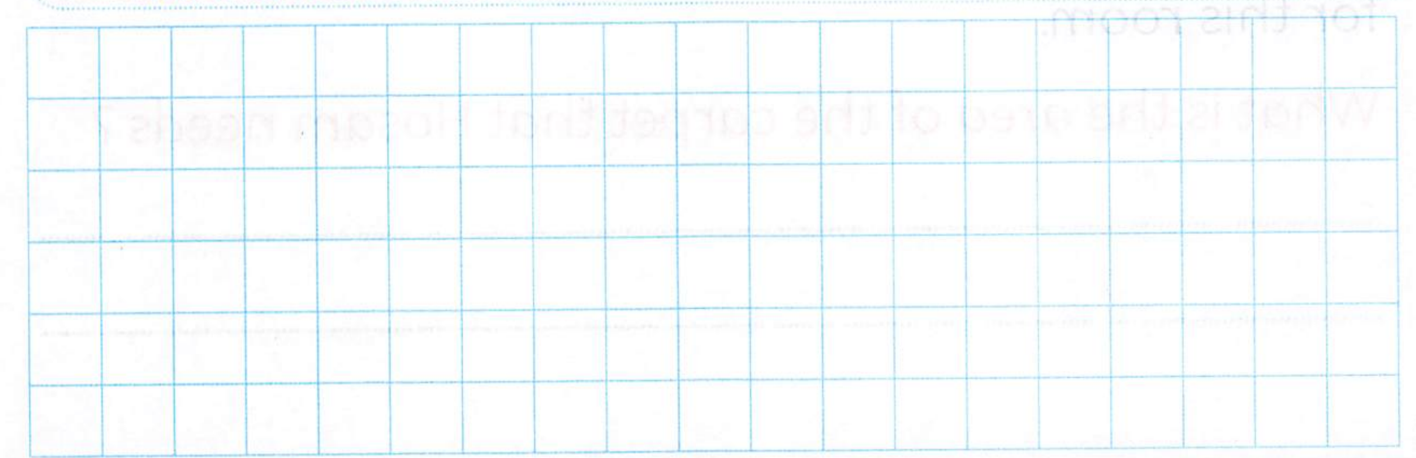
Perimeter = ... cm

Area = ... square cm

The two rectangles are equal in .... but different in ....



8 Construct two rectangles with a perimeter of 12 cm and different dimensions:





Chapter (5)
Lesson
(49)

Perimeter and area story problems

Ayesha builds a fence around her garden with dimensions of 9 m and 6 m

What is the length of the fence?

What is the area of the garden?



Fence perimeter = $(9 + 6) + (9 + 6)$

$= (15) + (15) = 30$ meters

Garden area $= (9 \times 6) = 54$ square meters

Notice: When calculating the length of the fence, we calculate the perimeter.



Solve the following story problems:

Hosam has a rectangular room with inside dimensions of 5m and 3m. He wants to buy a carpet for this room.

What is the area of the carpet that Hosam needs?

....

....

I learnt to solve perimeter and area story problems.

Engi has a rectangular sheet that is 50 cm long and 45 cm wide. Calculate its perimeter.

....

....

Farouk is building a rectangular patio with a length of 9 tiles and a width of 8 tiles.

How many tiles does Farouk need to build the patio?

....

....

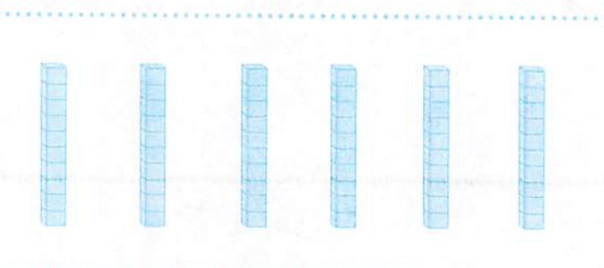
A farmer is building a fence around his rectangular garden. The garden is 8 meters long and 3 meters wide. What is the perimeter of the fence?

....

....

Chapter (5) Lesson (50)

Multiplying by 10 and Multiples of 10



6 tens

$6 \times 10 = 60$

Notice

$2 \times 4 = 8$ $2 \times 40 = 80$

$2 \times 400 = 800$ $2 \times 4000 = 8000$

1 Find the product:

$5 \times 1 =$	$2 \times 4 =$	$6 \times 8 =$ ....
$5 \times 10 =$	$2 \times 40 =$	$6 \times 80 =$ ....
$5 \times 100 =$	$2 \times 400 =$	$6 \times 800 =$ ....
$5 \times 1000 =$	$2 \times 4000 =$	$6 \times 8000 =$ ....



2 Match the equal products:

2×60	7×50
20×9	6×30
5×70	40×9
60×6	30×4

I learnt multiplying by multiples of 10 .



3 Find the product using patterns:

6 × 5 = ...	4 × 7 = ...	9 × 3 = ...
6 × 50 = ...	4 × 70 = ...	9 × 30 = ...
6 × 500 = ...	4 × 700 = ...	9 × 300 = ...
6 × 5000 = ...	4 × 7000 = ...	9 × 3000 = ...

4 Find the product:

3 × 90 = ...	7 × 5000 = ...	6 × 800 = ...
7 × 8000 = ...	4 × 400 = ...	6 × 500 = ...
4 × 900 = ...	7 × 60 = ...	7 × 400 = ...
8 × 300 = ...	5 × 600 = ...	6 × 600 = ...
6 × 60 = ...	7 × 200 = ...	9 × 200 = ...
5 × 2000 = ...	8 × 300 = ...	2 × 600 = ...

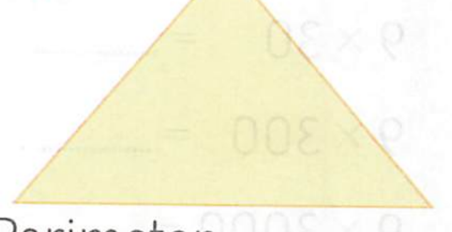
5 Find the missing number:

3 × ☐ = 600	200 × ☐ = 800	500 × ☐ = 2500
5 × 100 = ☐	300 × ☐ = 1500	900 × ☐ = 4500
7 × ☐ = 1400	400 × ☐ = 1600	800 × ☐ = 5600
8 × ☐ = 400	600 × ☐ = 1800	500 × ☐ = 3500

Review on Chapter Five

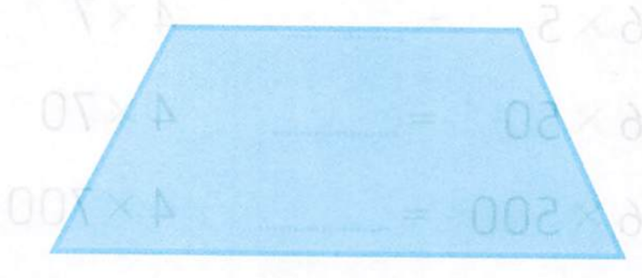


1 Find the perimeter:



Perimeter =

.... + ... + ... = ... cm



Perimeter =

.... + ... + ... + ... = ... cm



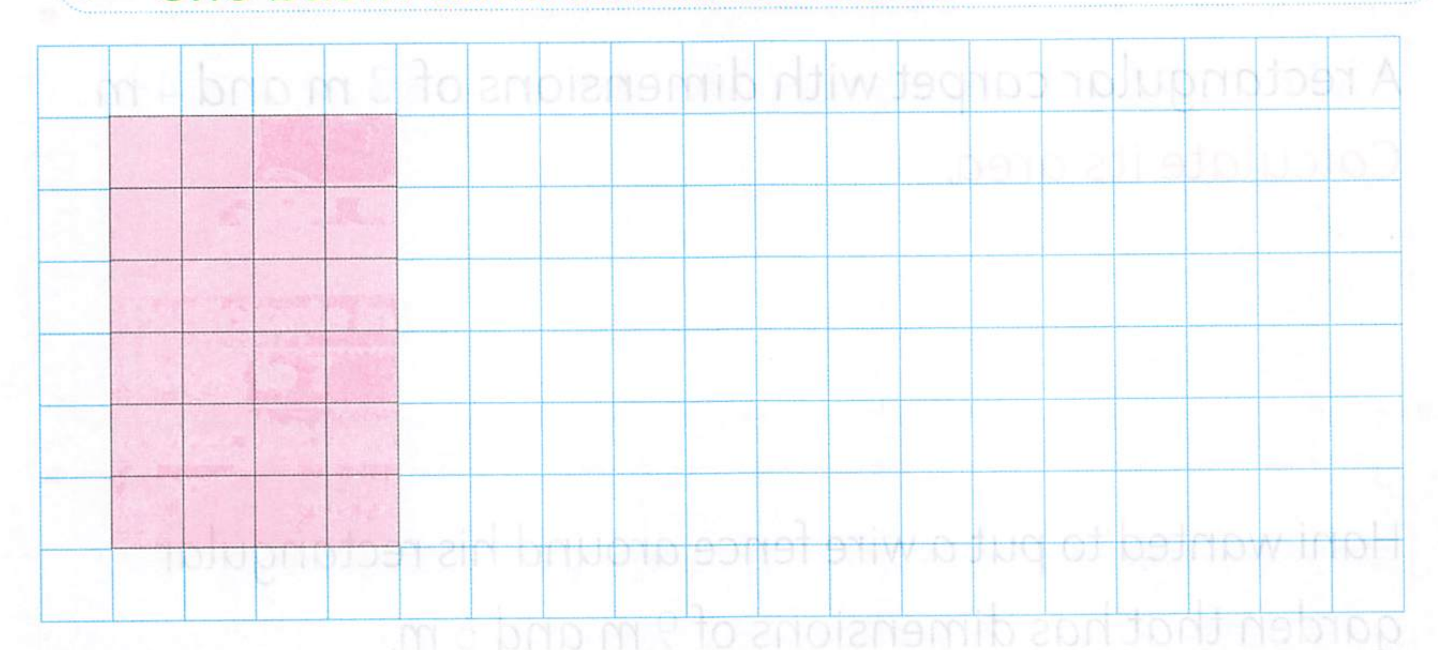
2 Complete:

(1) (2) (3) (4) (5)

Shape	Perimeter	Area
(1)	.... cm	.... square cm
(2)	.... cm	.... square cm
(3)	.... cm	.... square cm
(4)	.... cm	.... square cm
(5)	.... cm	.... square cm

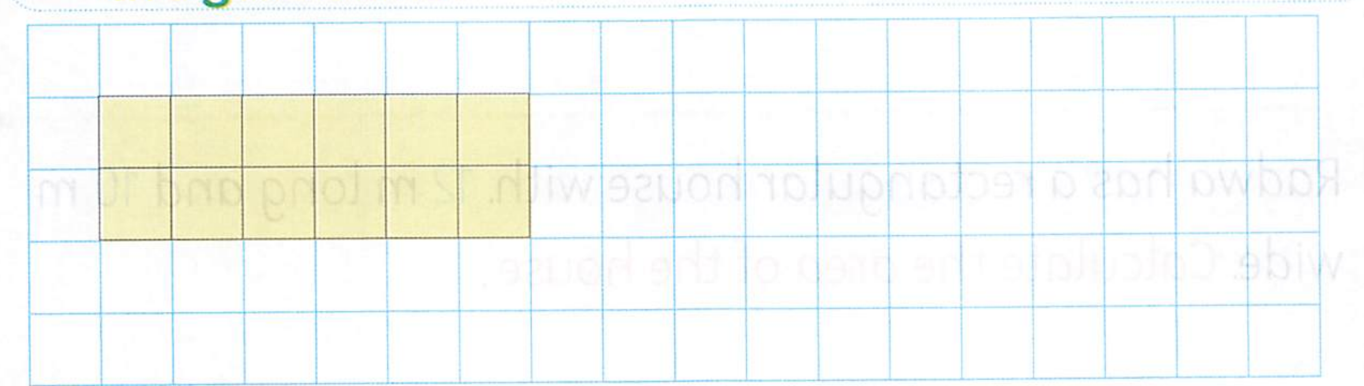


3 Draw a rectangle with the same area as the given one but in different dimensions:





4 Draw a rectangle with the same perimeter as the given one:





5 Find the product:

3 tens × 5 = ... tens

6 hundreds × 4 = ... hundreds

70 × 8 = ...

90 × 2 = ...

600 × 8 = ...

200 × 3 = ...

400 × 9 = ...

700 × 3 = ...



6 Solve the following story problems:

A rectangular carpet with dimensions of 3 m and 4 m.
Calculate its area.

Hani wanted to put a wire fence around his rectangular garden that has dimensions of 9 m and 6 m.
What is the length of the wire fence that Hani needs?

Radwa has a rectangular house with. 12 m long and 10 m wide. Calculate the area of the house.

Lamia wanted to build a fence around her rectangular farm. The farm has dimensions of 13 m and 10 m.
Calculate the length of the fence that Lamia needs.

Chapter Six



Chapter Six Objectives

Lesson (51)

- Explain patterns observed when multiplying by multiples of 10.

Lessons (52, 53)

- Investigate and apply patterns and strategies when multiplying by 9.
- Teach others one strategy for multiplying by 9.
- Identify patterns in multiplication and addition facts.
- Explain how patterns observed in multiplication and addition facts can be helpful when solving problems.
- Apply strategies to solve addition and multiplication facts quickly and accurately.

Lesson (54)

- Identify and describe patterns in the place value system up to the hundred thousands place.
- Apply strategies for ordering numbers.

Lesson (55)

- Apply a variety of strategies to solve addition problems.
- Explain the importance of learning different problem-solving strategies.

Lesson (56)

- Estimate the sum of two 3-digit numbers.
- Apply a variety of strategies to add two numbers up to four digits.

Lesson (57)

- Explain the relationship between addition and subtraction.
- Apply strategies to subtract two numbers up to four digits.
- Use addition to check answers to subtraction problems.

Lesson (58)

- Apply strategies to solve addition and subtraction story problems.
- Reflect on learning to identify areas of strength and opportunities for growth.

Lesson (59)

- Define volume as the measurement of the capacity of a container.
- Explain the relationship between milliliters and liters.
- Estimate the capacity of milliliter of water.
- Identify the best unit to measure the volume of a given container.

Lesson (60)

- Read volume measurements on a standard labeled container.
- Write what they have learned about volume measurement.

Multiplying by 10 and Multiples of 10

Chapter (6)
Lesson
(51)



1 Complete the table:

10×	1	2	3	4	5	6	7	8	9	10	11	12

Remember: On multiplying by 10 or its multiples, first we multiply numbers then we add the same number of zeroes

Notice

$6 \times 3 = 18$	$6 \times 30 = 180$	$6 \times 300 = 1800$	$6 \times 3000 = 18000$



2 Find the product:

3×4 = ...
3×40 = ...
3×400 = ...
3×4000 = ...

5×7 = ...
5×70 = ...
5×700 = ...
5×7000 = ...

4×8 = ...
4×80 = ...
4×800 = ...
4×8000 = ...

6×9 = ...
6×90 = ...
6×900 = ...
6×9000 = ...



Lesson 51



3 Find the product:



Multiply the two numbers and write zeroes on the right

30 × 50	12 × 10	300 × 2	4 × 2000 ....
60 × 90	10 × 100	7 × 40	300 × 50 ....
1000 × 5	70 × 5	80 × 900	7 × 4000 ....
4 × 50	9 × 50	7 × 60	100 × 170 ....



4 Color each 2 equations with the same product in the same color:

3 × 60	5 × 30	50 × 3	4 × 50
4 × 60	20 × 10	90 × 2	30 × 8

5 Answer the following as the example:

7 × 50 = 7 × 5 × 10 = (7 × 5) × 10 = 35 × 10 = 350



Notice We use ( ) brackets to make multiplication easy and tell us which part we must find first.

4 × 90
(............ × ....) × 10
= ....

7 × 60
(............ × ....) × 10
= ....

8 × 30
(............ × ....) × 10
= ....



5 × 80
(............ × ....) × 10
= ....

9 × 70
(............ × ....) × 10
= ....

4 × 50
(............ × ....) × 10
= ....







7 × 20
(............ × ....) × 10
= ....

4 × 60
(............ × ....) × 10
= ....

8 × 40
(............ × ....) × 10
= ....

Chapter (6)
Lessons
(52 , 53)

Multiplying by 9

We'll learn to find out multiplication patterns by 9

1	×	9	=	09
2	×	9	=	18
3	×	9	=	27
4	×	9	=	36
5	×	9	=	45
6	×	9	=	54
7	×	9	=	63
8	×	9	=	72
9	×	9	=	81
10	×	9	=	90



Example: To find the product 4×9 we make.

First step : 4×9= 3 ☐ because 4 - 1=3

Second step:4×9= 3 6 because 3+6=9



The tens digit is 1 less than the first factor, the sum of ones and tens is 9

The ones digit goes down by one each time
The tens digit goes up by one each time





1 Write the missing number:

$5 \times 9 =$ 4 ☐

$2 \times 9 =$ 1 ☐

$7 \times 9 =$ ☐ 3

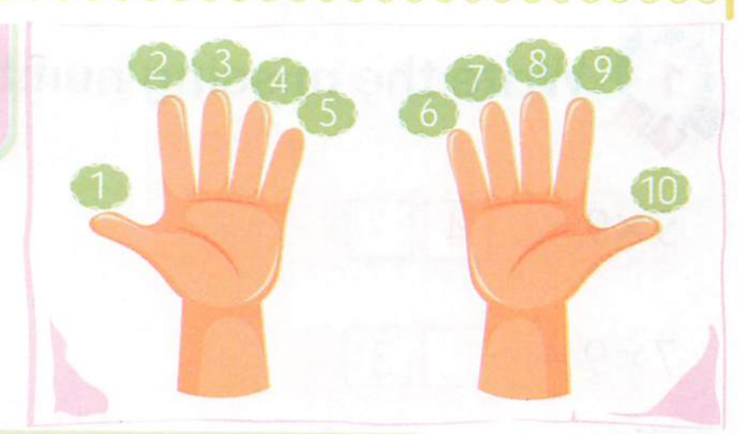
$4 \times 9 =$ ☐ 6

2 Compare using (> , < or =):

9×4	5×9	6×6	4×9
2×9	9×9	9×9	8×9
3×9	9×3	3×3	1×9
9×1	9×0	8×7	9×6
2×9	9×3	8×9	9×8
9×2	3×6	9×6	8×8
7×5	4×6	5×10	4×8
6×8	9×5	4×7	8×7



Finger trick strategy



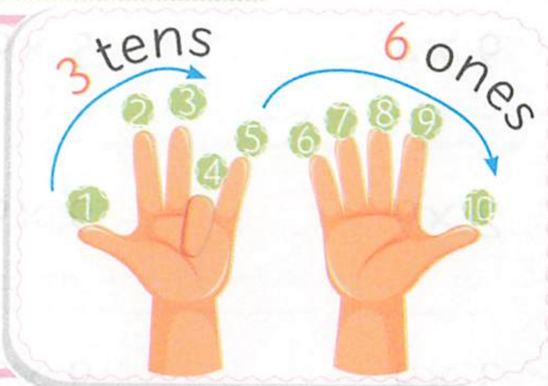


Find the product





Bend down finger number (4)
Fingers to the left represent the tens.
Fingers to the right represent the ones.



The product is ...









1 Complete:



9 × 3 = ...



9 × 6 = ...



9 × 7 = ...



9 × 8 = ...



9 × .... = ...



9 × .... = ...



2 Find the missing number:

9 × .... = 27	9 × .... = 45	9 × .... = 54
9 × .... = 63	9 × .... = 72	9 × .... = 18
.... × 3 = 27	.... × 9 = 81	.... × 5 = 45
9 × .... = 0	6 × .... = 36	1 × .... = 9
4 × .... = 36	.... × 11 = 99	9 × .... = 108

Multiplying by 10 facts strategy

To find the product

8 × 9

First: 8 × 10 = 80

Second: 80 - 8 = 72

8 × 9 = 72

To find the product

6 × 9

First: 6 × 10 = 60

Second: 60 - 6 = 54

6 × 9 = 54

3 Find the product:

9 × 6 = ...	3 × 9 = ...
4 × 9 = ...	7 × 9 = ...
5 × 9 = ...	8 × 9 = ...
9 × 9 = ...	9 × 10 = ...



4 Complete the table:

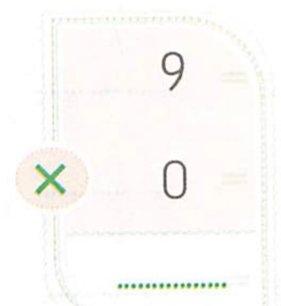
×9	1	2	3	4	5	6	7	8	9	10	11	12



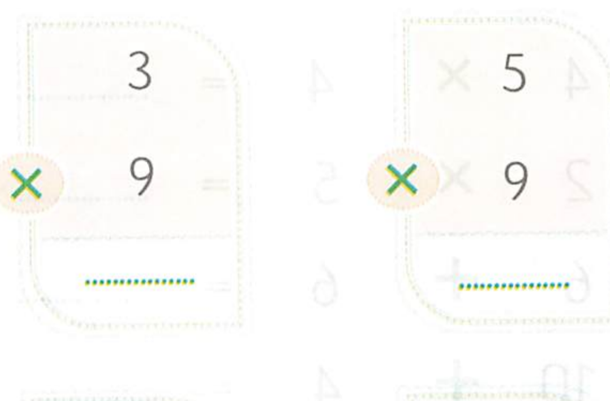
5 Find the missing number:

3 × .... = 15	.... × 9 = 54	5 × .... = 25	1 × .... = 9
6 × .... = 36	2 × .... = 18	5 × .... = 35	9 × .... = 0
8 × .... = 72	.... × 3 = 18	6 × .... = 48	6 × 7 = ...
1 × .... = 12	8 × .... = 0	9 × .... = 45	4 × 9 = ...





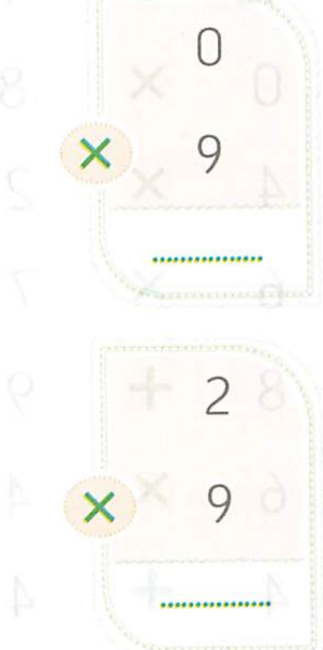
6 Find the product:



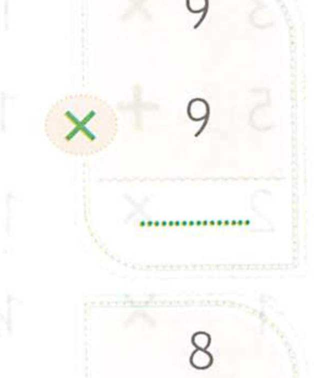


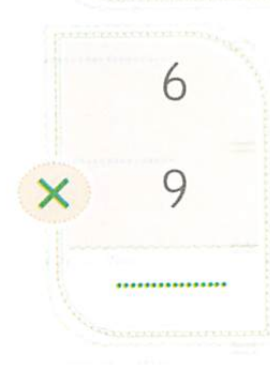












$9 \times 0 =$	$7 \times 9 =$	$3 \times 9 =$	$5 \times 9 =$ ....
$9 \times 2 =$	$9 \times 4 =$	$9 \times 7 =$	$0 \times 9 =$ ....
$9 \times 1 =$	$9 \times 9 =$	$9 \times 5 =$	$2 \times 9 =$ ....
$4 \times 9 =$	$8 \times 9 =$	$6 \times 9 =$	$1 \times 9 =$ ....
$9 \times 8 =$	$9 \times 6 =$	$9 \times 10 =$	$10 \times 9 =$ ....



7 Find the results:

$4 \times 4 =$ ....

$2 \times 5 =$ ....

$6 + 6 =$ ....

$10 + 4 =$ ....

$0 \times 8 =$ ....

$4 \times 2 =$ ....

$6 \times 7 =$ ....

$8 + 9 =$ ....

$6 \times 4 =$ ....

$4 + 4 =$ ....

$5 + 8 =$ ....

$3 \times 3 =$ ....

$5 \times 10 =$ ....

$2 \times 9 =$ ....

$1 \times 1 =$ ....

$9 \times 7 =$ ....

$1 \times 0 =$ ....

$3 \times 9 =$ ....

$0 + 4 =$ ....

$2 \times 4 =$ ....

$5 + 10 =$ ....

$2 + 6 =$ ....

$1 \times 9 =$ ....

$1 + 9 =$ ....

$3 \times 11 =$ ....

$5 + 11 =$ ....

$2 \times 11 =$ ....

$1 \times 12 =$ ....

$2 + 9 =$ ....

$4 \times 10 =$ ....

$4 + 5 =$ ....

$8 \times 9 =$ ....

$1 + 0 =$ ....

$5 \times 6 =$ ....

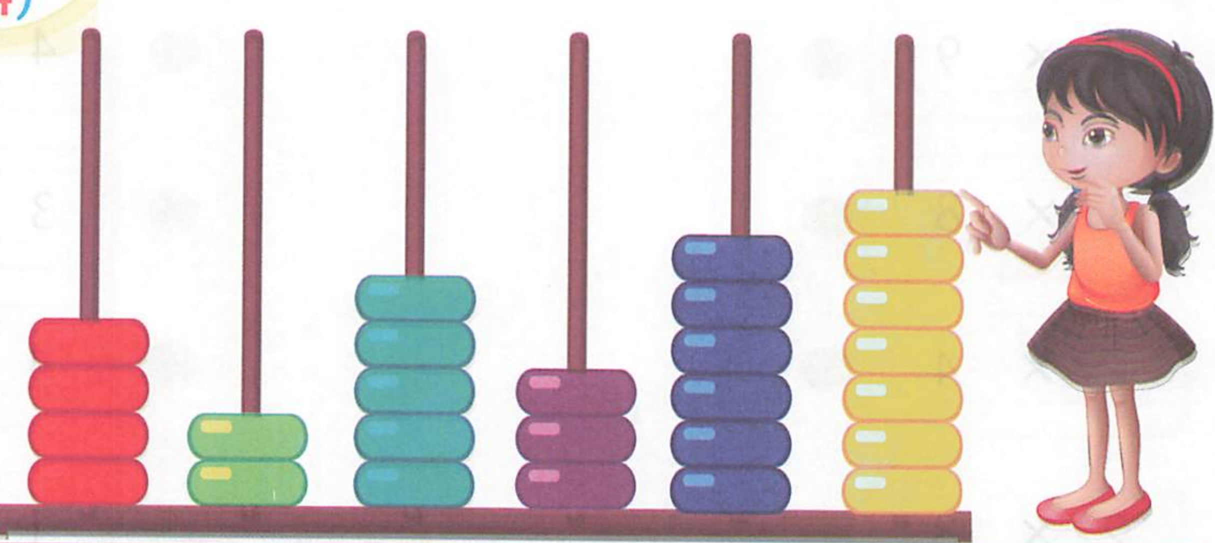


8 Match the equal products:

2 × 9	4 × 6
3 × 8	3 × 6
2 × 4	4 × 4
2 × 8	1 × 8
6 × 6	5 × 0
9 × 0	4 × 9
5 × 6	2 × 6
3 × 4	6 × 5
4 × 5	1 × 9
5 × 8	2 × 10
3 × 3	4 × 10

Chapter (6)
Lesson
(54)

The place value



Number	4	2	5	3	6	7
Place value	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
Value	400000	20000	5000	300	60	7

Complete :

876543 = ... + ... + ... + ... + ... + ...

- 3 Ones = ...
- 4 Tens = ...
- 5 Hundreds = ...
- 6 Thousands = ...
- 7 Ten thousands = ...
- 8 Hundred thousands = ...

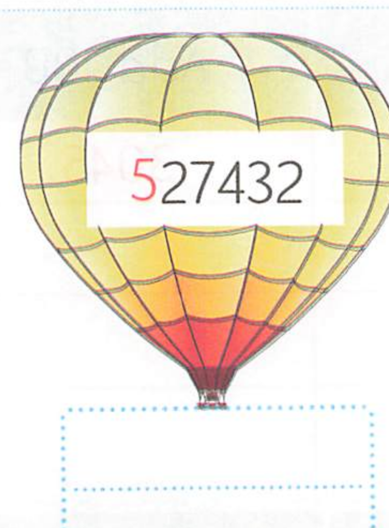
I learnt to write numbers using place value.



1 Write the place value and the value of 5 in the following as the example:



Tens
50



....
....



....
....

826543

....
....



....
....

65413

....
....



2 Complete in the same pattern:

1. 5000 , 6000 , 7000 , ... , ... , ...
2. 29500 , 29600 , 29700 , ... , ... , ...
3. 23850 , 23840 , 23830 , ... , ... , ...
4. 777777 , 666666 , 555555 , ... , ... , ...

Lesson 54



3 Complete the table as the example:

Number	Add 10	Add 100	Add 1000
2945	2955	3045	3945
3789			
63521			
49803			

Number	Subtract 10	Subtract 100	Subtract 1000
7821	7811	7721	6821
59435			
6872			
48934			



4 Complete the table:

Number	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
29825						
365024						
567346						
349000						
796001						
625007						



5 Write in standard form:

5 Thousands, 6 Hundreds, 4 Ones.

= ....

Forty-seven thousand, twenty- five.

= ....

One hundred sixty-five thousand, three hundred fifteen.

= ....

Fifty-seven thousand, one hundred fifty-three.

= ....



6 Write in expanded form:

1. 734527 = ... + ... + ... + ... + ... + ...
2. 62549 = ... + ... + ... + ... + ...
3. 853123 = ... + ... + ... + ... + ... + ...
4. 393784 = ... + ... + ... + ... + ... + ...
5. 28504 = ... + ... + ... + ... + ...
6. 934315 = ... + ... + ... + ... + ... + ...
7. 754624 = ... + ... + ... + ... + ... + ...
8. 271532 = ... + ... + ... + ... + ... + ...
9. 36829 = ... + ... + ... + ... + ...

Lesson 54



7 Write in standard form:

1. 321 Thousands, 2 Hundreds, 9 Tens, 2 Ones = ...
2. 16 Thousands, 7 Hundreds, 3 Tens, 8 Ones = ...
3. 432 Thousands, 7 Tens = ...
4. 632 Thousands, 9 Ones = ...
5. 7 Hundreds, 5 Tens, 6 Ones = ...
6. 5 Thousands, 7 Ones = ...



8 Color the greatest number in red and the smallest number in yellow in each set:

(A)	(B)	(C)	(D)
7117	88128	99990	98445
7711	88812	99099	98454
7171	88218	99909	78544
1177	18882	90999	44598

 Compare using (>,< or =):

390007  39007

27685  27865

79284  792840

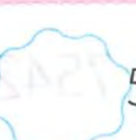
300 hundreds ◯ 500 tens

50251  50351

28345  29345

849573  949573

53214  53214

Five hundred thousand  50632

94004  40094

36752  36752

64825  64835

35 Thousands  35 hundreds

19732  19732



10 Arrange the following:

32512 , 111111 , 32519 , 32517

Ascendingly: .... , ... , ... , ...

Descendingly: .... , ... , ... , ...

29909 , 20990 , 90000 , 29999

Ascendingly: .... , ... , ... , ...

Descendingly: .... , ... , ... , ...

730601 , 730061 , 730160 , 730016

Ascendingly: .... , ... , ... , ...

Descendingly: .... , ... , ... , ...

753246 , 99999 , 752346 , 754246

Ascendingly: .... , ... , ... , ...

Descendingly: .... , ... , ... , ...

111111 , 100011 , 10001 , 110001

Ascendingly: .... , ... , ... , ...

Descendingly: .... , ... , ... , ...

Chapter (6) Lesson (55)

Addition strategies

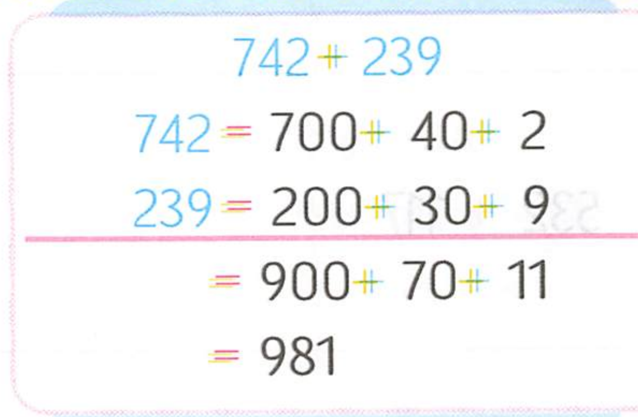


Find the sum: 742 + 239

Adding with regrouping strategy

Hundreds	Tens	Ones
7	4	2
2	3	+ 9
9	7	11
9	8	1

Decomposing numbers strategy



742 + 239

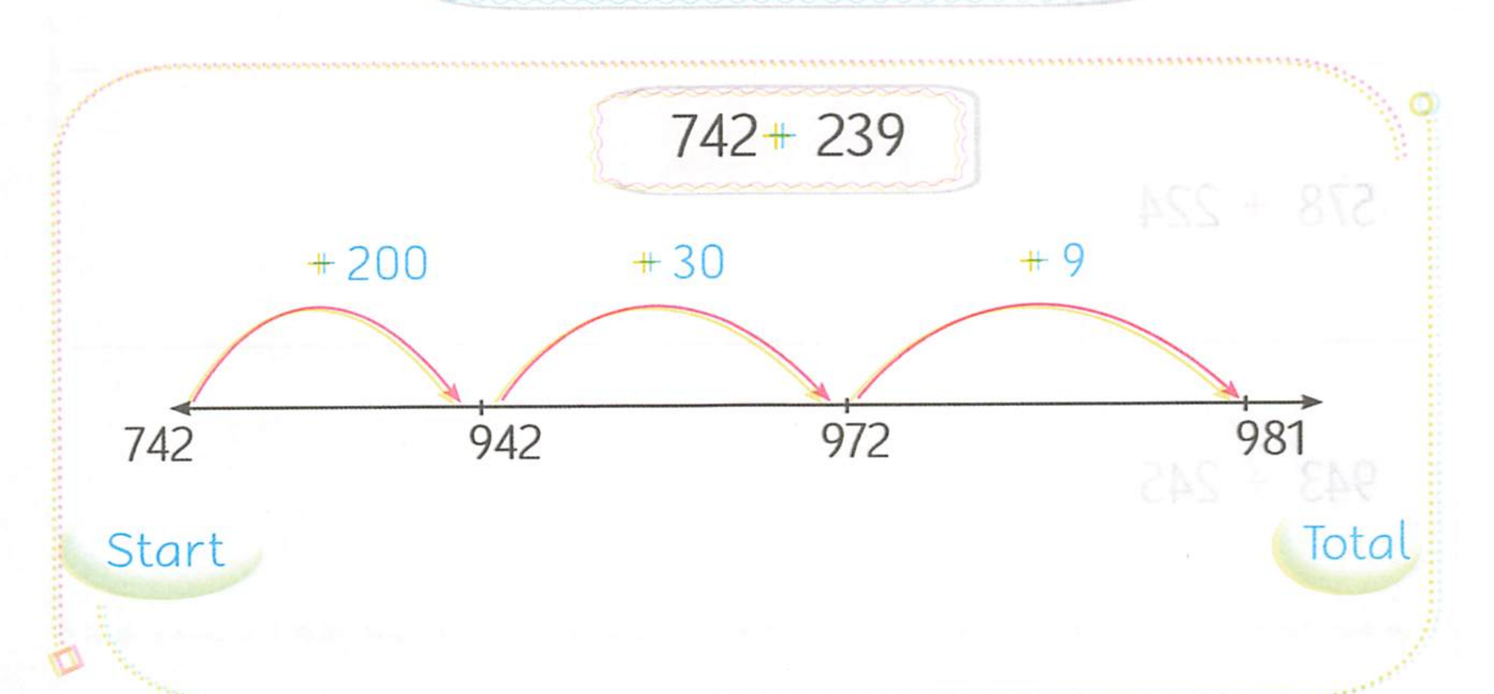
742 = 700 + 40 + 2

239 = 200 + 30 + 9

= 900 + 70 + 11

= 981

Number line strategy



Lesson 55



Use one of addition strategies to find the sum:

Addition sentence	First strategy	Second strategy
89 + 175		
532 + 117		
223 + 315		
578 + 224		
943 + 245		

Estimating the sum of two 3-digit numbers

Chapter (6)
Lesson (56)

Remember

(1) Rounding to the nearest ten

If the digit in ones place is less than 5, replace it by 0 and write the other digits

724 ⟶ 720
351 ⟶ 350

If the digit in ones place is 5 or more, replace it by 0 and add one to the digit in the tens place

315 ⟶ 320
698 ⟶ 700

(2) Rounding to the nearest hundred

If the digit in tens place is less than 5, replace the ones and tens places by 0 then write the other digit

641 ⟶ 600
939 ⟶ 900

If the digit in tens place is 5 or more, replace the ones and tens places by 0 and add one to the digit in the hundred place

651 ⟶ 700
981 ⟶ 1000

Lesson 56



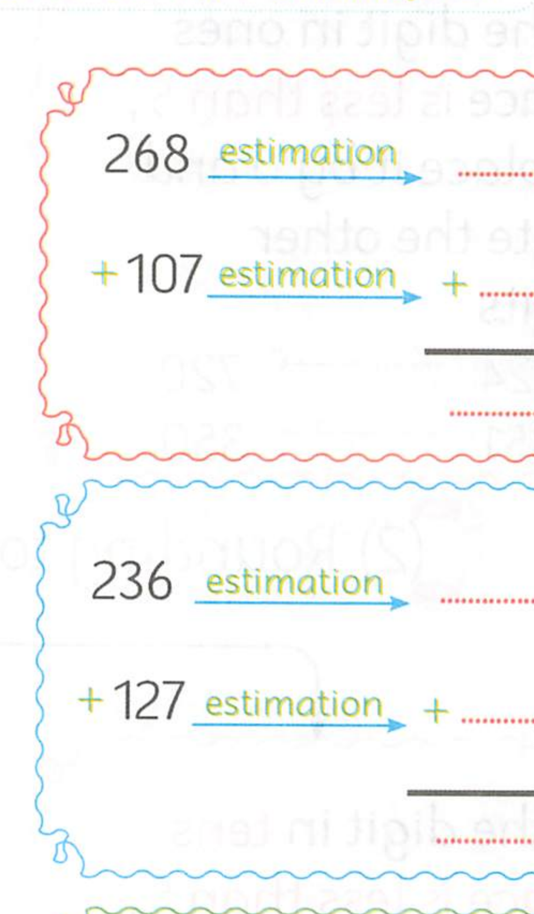
1 Choose the correct answer:

1. The estimation of 742 to the nearest ten (740 , 74 , 750)
2. The estimation of 998 to the nearest hundred (990 , 900 , 1000)
3. The estimation of 457 to the nearest ten (450 , 45 , 460)
4. The estimation of 376 to the nearest hundred (370 , 300 , 400)



2 Estimate the following sums as the example:

432 —estimation→ 400
+ 621 —estimation→ + 600
1000



268 —estimation→ ....
+ 107 —estimation→ + ...
....

635 —estimation→ ....
+ 311 —estimation→ + ...
....

236 —estimation→ ....
+ 127 —estimation→ + ...
....

745 —estimation→ ....
+ 217 —estimation→ + ...
....

473 —estimation→ ....
+ 309 —estimation→ + ...
....



3 Find the sum:

4315 + 2413

3775 + 6400

6650 + 5400

2800 + 1769

7345 + 4213

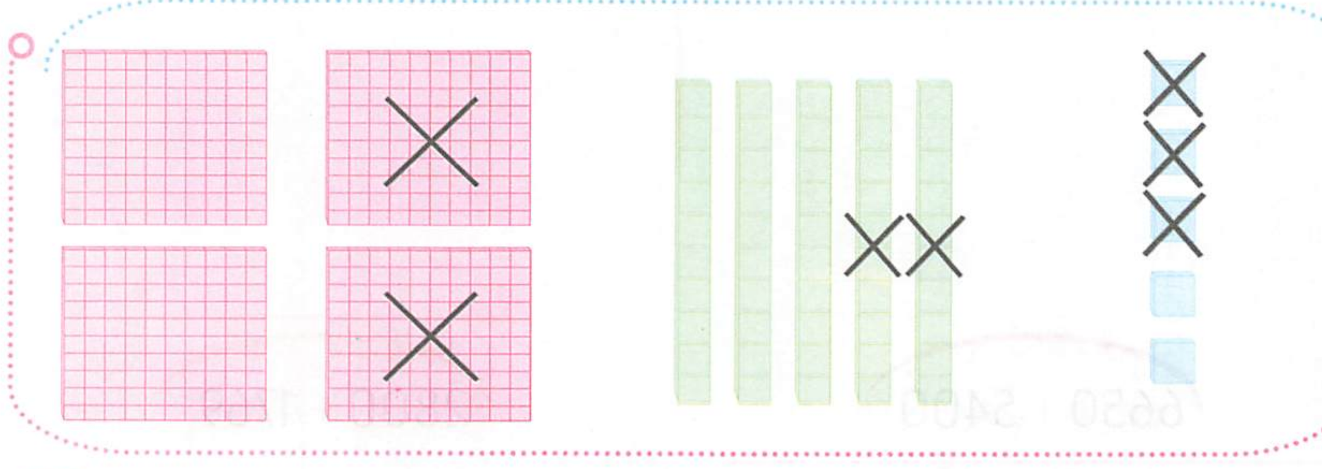
4231 + 2868

Chapter (6) Lesson (57)

Subtraction strategies

First strategy: Place value picture

Subtract: 455 - 223 = 232





Use place value picture strategy to find the difference:

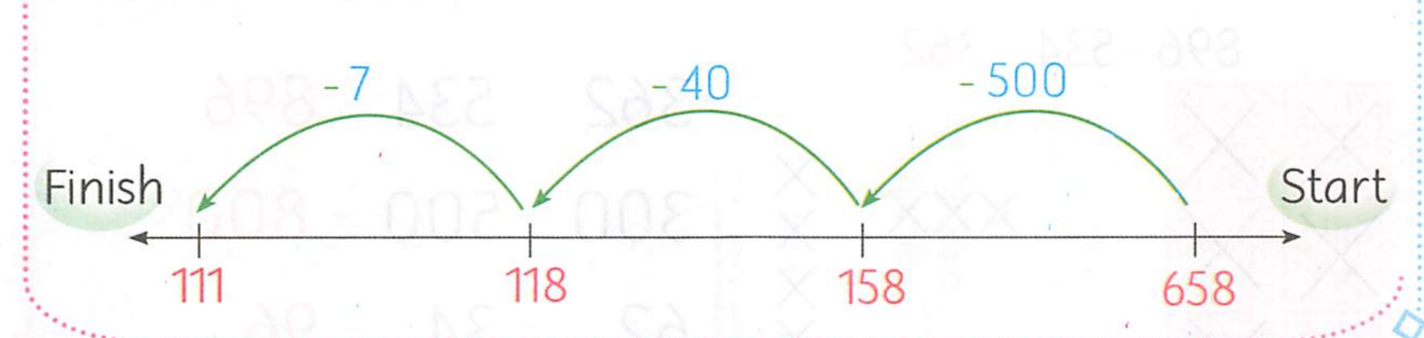
875 - 564 = ...	432 - 222 = ...
365 - 241 = ...	546 - 323 = ...





Second strategy: Number line

Subtract: 658 - 547 = 111





Use the number line strategy to find the difference:

954 - 453 = ...

648 - 436 = ...

327 - 214 = ...

873 - 352 = ...

860 - 430 = ...

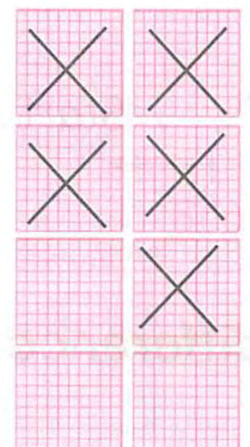
765 - 345 = ...



Lesson 57

1 Use the place value strategy to find the difference then check by addition problem:

Subtraction problem	Addition problem to check
896 - 534 = 362	362 + 534 = 896 300 + 500 = 800 62 + 34 = 96 800 + 96 = 896
925 - 610 = ...	
3557 - 1325 = ...	







2 Use one of subtraction strategies to find the difference then check by addition problem:

Subtraction problem	Addition problem to check
9548 - 4135 = ...	
1579 - 1525 = ...	
9437 - 4235 = ...	

Addition and subtraction story problems strategies



1 Tick (✓) the right operation:

Mona bought 3 crayon boxes. Each box has 6 crayons.
How many crayons are there with Mona?

addition subtraction multiplication division





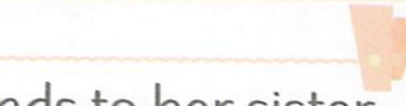
Huda saved 18 pounds in a month. She saved 17 pounds in the second month.
How many pounds did Huda save in the two months?

addition subtraction multiplication division



Ahmed distributed 8 apples equally among 4 friends.
How many apples did everyone take?

addition subtraction multiplication division



Mona had 150 pounds. She gave 50 pounds to her sister.
How many pounds are left with Mona?

addition subtraction multiplication division





I learnt to add and subtract to solve story problems.



2 Solve the following problems:

A school has 875 students. Another school has 624 students.
What is the difference between number of students in both schools?

....

....

....

A library had 2475 books. 325 books were borrowed.
How many books are left in the library now?



....

....

....

A school has 743 boys and 598 girls.
How many students are there in the school?



....

....

....

In a library, there are 3 boxes of books. Each box has 200 books.

How many books are there in the library?

....

....

....

Omnia bought a vacuum cleaner for 2750 pounds. She paid 950 pounds.

How much money must Omnia pay?

....

....

....

Ahmed saved 2785 pounds in a month. In the next month he saved 1395 pounds.

How many pounds did Ahmed save in all?

....

....

....

Capacity

Chapter (6) Lesson (59)



Remember

Ruler is used for measuring lengths

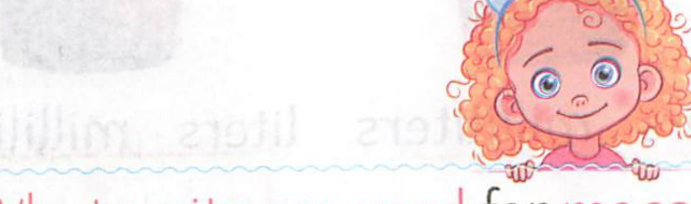
Measuring lengths units

millimeter - centimeter - meter - kilometer

Clock is used for measuring time

Measuring time units

second - minute - hour - day - week - month - year



What units are used for measuring liquid capacity ?

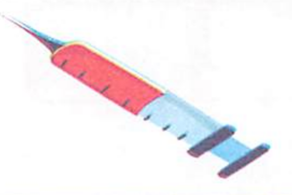
Capacity is the amount of liquid a container can hold.

Units of capacity

Liter is used to measure big amounts (L)

Milliliter is used to measure small amounts (ml)







I learnt capacity measuring units.

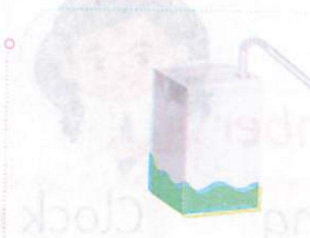


Lesson 59

Tick (✓) below the suitable unit:



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters



liters	milliliters

Relation between milliliter (ml) and liter (l)

Liter = 1000 milliliters
Liter can fill 10 glasses. Each glass can hold 100 milliliters



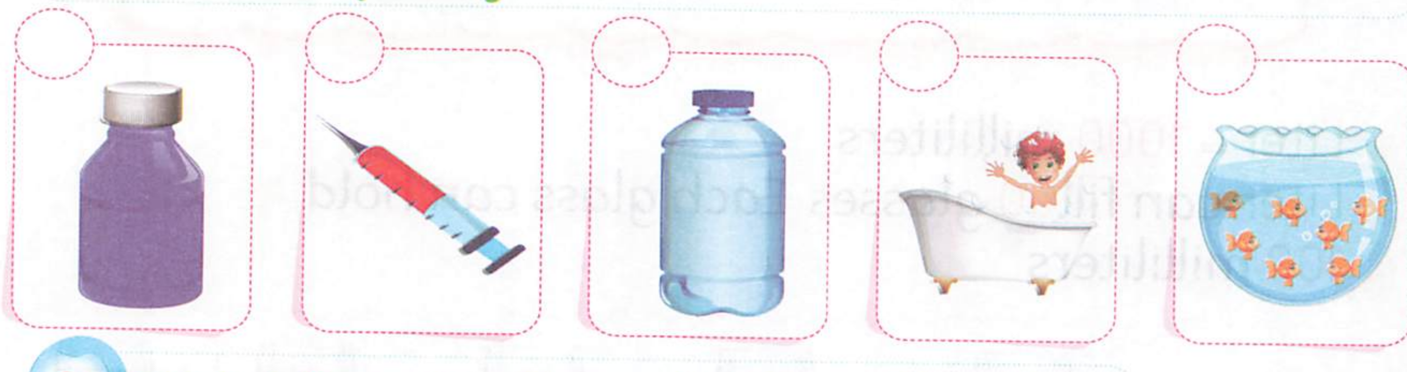
1 Which of the following has more capacity? Use (> , < or =):



I learnt to estimate the liter capacity.



2 Arrange from the smallest to the greatest according to the capacity:



3 Tick (✓) under the suitable estimation:

35 l	800 ml	35 l	400 ml	35 l	40 ml

1 l	5 ml	3 l	4 ml	4 l	120 ml

5 l	200 ml	35 l	500 ml	15 l	550 ml

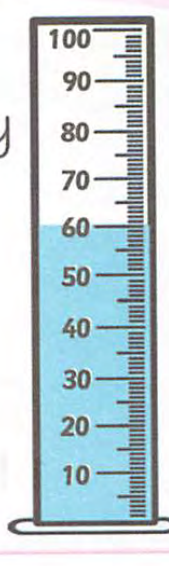
Chapter (6)
Lesson
(60)

Measuring capacity

Graduated cylinder

Note the following picture:

- Graduated cylinder is used to measure liquid capacity
- Lines refers to each milliliter
- It has scale from 0 to 100
- The capacity of the liquid is 60 ml



1 Answer the following:



If a liter fills 10 cups, each cup is 100 milliliters. Find the capacity as the example.

1. 2 cups = 2 × 100 = 200 milliliters
2. 3 cups = ... × .... = ... milliliters
3. 5 cups = ... × .... = ... milliliters
4. 7 cups = ... × .... = ... milliliters
5. 9 cups = ... × .... = ... milliliters

Lesson 60



2 Write the capacity of each container:

100 ml

.... ml

300 ml

.... ml

1 l

.... ml

200 ml

100 ml

.... ml

500 ml

.... ml

1 l

.... ml



3 Match:

1 l

1 l

1 l

1 l

1 l

1 l

1 l

1 l

1 l
100 ml
500 ml
900 ml
400 ml
200 ml
600 ml
800 ml

Review on Chapter Six



1 Find the products:

10	×	9	=	....
10	×	2	=	....
400	×	3	=	....
50	×	8	=	....
60	×	6	=	....
900	×	7	=	....
100	×	9	=	....
500	×	8	=	....
30	×	7	=	....

70	×	8	=	....
7000	×	2	=	....
300	×	9	=	....
200	×	2	=	....
4000	×	7	=	....
600	×	9	=	....
2000	×	6	=	....
800	×	8	=	....
7000	×	1	=	....



2 Find the results:

$$\begin{array}{r} 375 \\ +\ 83 \\ \hline \end{array} \quad \begin{array}{r} 236 \\ +\ 464 \\ \hline \end{array} \quad \begin{array}{r} 2354 \\ +\ 3271 \\ \hline \end{array} \quad \begin{array}{r} 6321 \\ +\ 2594 \\ \hline \end{array}$$

$$\begin{array}{r} 5123 \\ -\ 3011 \\ \hline \end{array} \quad \begin{array}{r} 7897 \\ -\ 5438 \\ \hline \end{array} \quad \begin{array}{r} 3758 \\ -\ 375 \\ \hline \end{array} \quad \begin{array}{r} 9873 \\ -\ 3488 \\ \hline \end{array}$$



3 Circle the value of colored digit:

1. 3457 (4 - 400 - 4000)
2. 43657 (500 - 5 - 50)
3. 6478 (600 - 6000 - 60)
4. 4237 (70 - 7 - 7000)
5. 45324 (40000 - 400 - 400000)
6. 362452 (600 - 60000 - 6000)

4 Write the place value of the colored digit:

3421	....	731278	....
7892	....	342501	....
31576	....	398750	....

5 Compare using (> , < or =):

2436	◯	243	8725	◯	83001
49509	◯	59760	7351	◯	7372
42134	◯	34154	1000	◯	100 tens
7999	◯	32000	7825	◯	8725
79000	◯	79005	375	◯	1000



6 Story problems:

If a school has 653 boys and 598 girls.

How many students are there in the school?

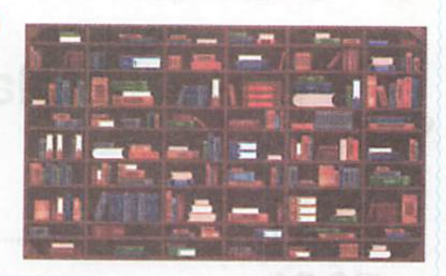


....

....

A library had 3475 books. 625 books were borrowed.

How many books are left in the library?



....

....

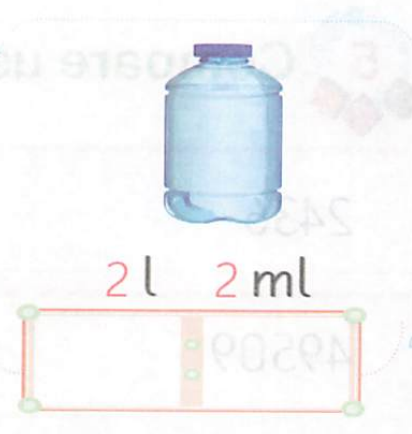
7 Put (✓) below the suitable estimation:



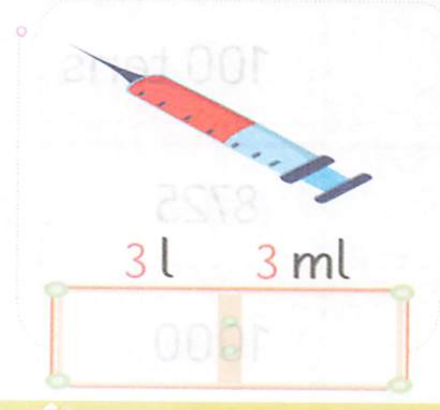
250 l 250 ml



30 l 30 ml



2 l 2 ml



3 l 3 ml



200 l 200 ml



100 l 100 ml

Worksheet

1 Choose the correct answer:

1. $8 \times 9 =$ .... (27 - 39 - 72)
2. 700 hundreds = ... thousands (7 - 70 - 700)
3. 500 cm = ... m (5 - 50 - 500)
4. $81 \div 9$ .... 3×3 (> - < - =)
5. The value of 8 in 3861 (8 - 800 - 80)
6. 2000 ml = ... l (20 - 200 - 2)

2 Complete:

1. The factors of 4 are .... , ... , ...
2. 4040 in word form ....
3. The area of [a rectangle divided into 6 squares] = ... □
4. $20 \times 50 =$ ....
5. .... $\div 6 = 5$

3 Write the place value and the value for the colored digit:

Number	Place value	Value
625316		
98271		
15674		
820974		



4 Calculate area and perimeter:

7 cm

3 cm

Area = ...

Perimeter = ...

8 cm

5 cm

Area = ...

Perimeter = ...



5 Firstly: Write the time on the digital clock:







Secondly: Answer:

Samer wanted to distribute 50 pounds equally among 5 of his children.

How many pounds will each one take?

....